# Installation manual

## Washer extractor

## W575S, W585S, W5105S, W5130S, W5180S, W5250S, W5330S

### Type W3...

Thinking of you

Electrolux

Original instructions

438 9055-40/EN
2013.02.21

# Contents

1 Safety Precautions ..... 5
1.1 Symbols ..... 5
2 Technical data ..... 6
2.1 Drawing ..... 6
2.1.1 W575S, W585S, W5105S, W5130S ..... 6
2.1.2 W5180S ..... 7
2.1.3 W5250S, W5330S ..... 8
2.2 Technical data ..... 9
2.3 Connections ..... 9
2.4 Sound levels ..... 9
3 Setup ..... 10
3.1 Unpacking ..... 10
3.2 Siting ..... 11
3.3 Mechanical installation ..... 12
3.3.1 Casting a plinth ..... 14
3.3.2 Chemical bolts ..... 15
3.3.3 Chemical anchors ..... 16
4 Marine installation ..... 17
4.1 Siting ..... 17
4.2 Mechanical installation ..... 18
4.2.1 Casting a plinth ..... 19
4.2.2 Welding a foundation ..... 20
5 Water connection ..... 21
6 Connection of external dosing systems ..... 23
6.1 Connection of the hoses ..... 23
6.2 Electrical connection of external dosing system ..... 24
6.2.1 Machine with connectors ..... 24
6.2.2 Machine without connectors ..... 25
6.2.3 Outputs ..... 26
6.2.4 Inputs ..... 28
7 Drain connection ..... 29
8 Electrical connection ..... 30
8.1 Electrical installation ..... 30
8.2 Electrical connections ..... 31
8.3 Machine connection ..... 36
8.3.1 Single-phase connection ..... 36
8.3.2 Three-phase connection ..... 37
8.4 Functions for I/O-cards ..... 38
8.4.1 External coin meter/Central payment (2A) ..... 38
8.4.2 Central payment (2B) ..... 39
8.4.3 Central payment (2C) ..... 40
8.4.4 Outputs for detergent signals and inputs for pause signals, "empty" signal and price reduction (2D) ..... 41
8.4.5 Central booking/payment (2F) ..... 42
8.4.6 Machines with I/O module type 3 ..... 43
9 Steam connection ..... 44
10 Selection of language ..... 46

# Contents

11 Function check ..... 47

The manufacturer reserves the right to make changes to design and component specifications.

# 1 Safety Precautions

**The machine is only intended for water-wash use.**

**Only use detergent intended for water-wash of textiles. Never use dry cleaning agents.**

**Do not allow minors to use the machine.**

**Do not hose down the machine with water.**

**The machine's door lock must under no circumstances be bypassed.**

**If the machine develops a fault, this must be reported to the person in charge as soon as possible. This is important both for your safety and that of others.**

**This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.**

**Children of less than 3 years should be kept away unless continuously supervised.**

**DO NOT MODIFY THIS APPLIANCE.**

**All external equipment which is connected to the machine must be CE/EMC-approved and connected using an approved shielded cable.**
**All external equipment must be connected according to the instructions in the installation manual.**

**In order to prevent damage to the electronics (and other parts) that may occur as the result of condensation, the machine should be placed in room temperature for 24 hours before being used for the first time.**

**Servicing shall be carried out only by authorized personnel.**

**Only authorized spare parts shall be used.**

**When performing service or replacing parts, the power must be disconnected.**

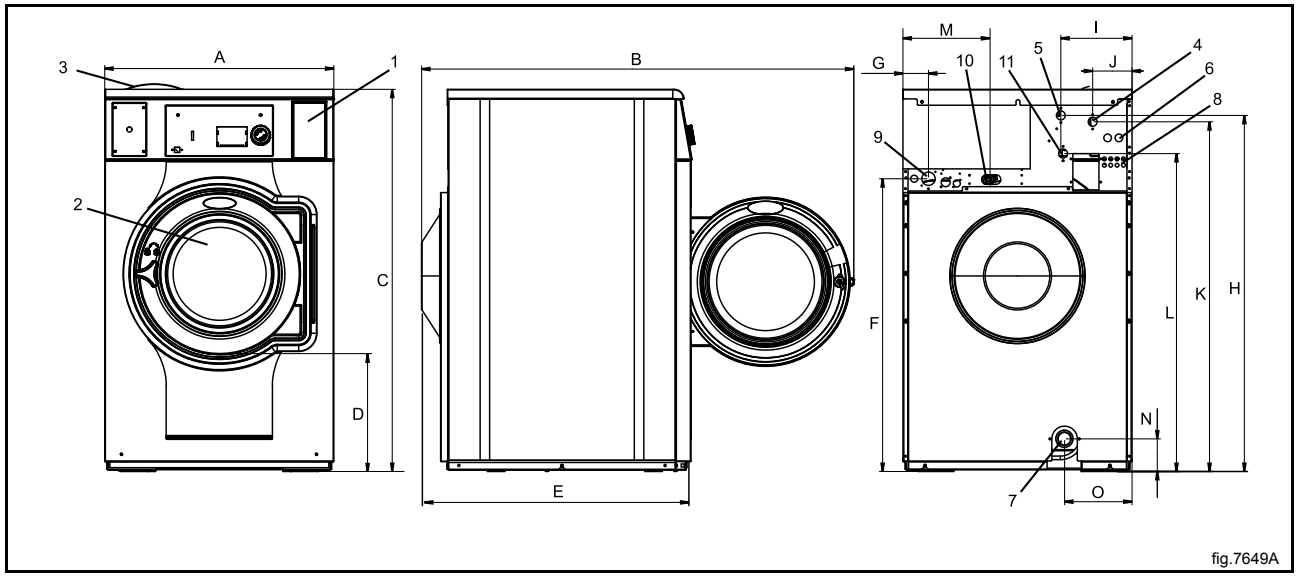
## 1.1 Symbols

| | |
|---|---|
| | Caution |
| | Caution, hot surface |
| | Read the instructions before using the machine |

# 2 Technical data

## 2.1 Drawing

### 2.1.1 W575S, W585S, W5105S, W5130S

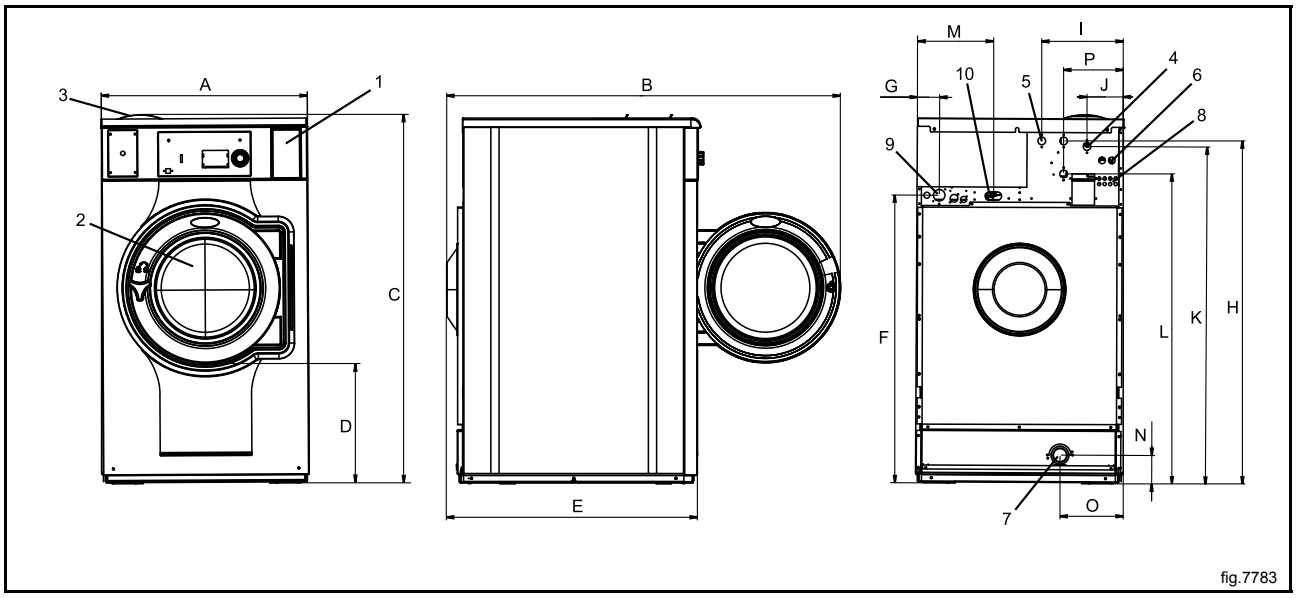



| | |
|---|---|
| 1 | Operating panel |
| 2 | Door opening, W575S, W585S: ⌀ 310 mm, W5105S, W5130S: ⌀ 365 mm |
| 3 | Detergent container |
| 4 | Cold water |
| 5 | Hot water |
| 6 | Water re-use |
| 7 | Drain valve |
| 8 | Liquid detergent supply |
| 9 | Electrical connection |
| 10 | Steam connection |

| mm | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| W575S | 660 | 1094 | 1131 | 355 | 686 | 835 | 80 | 1034 |
| W585S | 660 | 1157 | 1132 | 355 | 726 | 836 | 80 | 1035 |
| W5105S | 720 | 1187 | 1200 | 365 | 697 | 920 | 80 | 1119 |
| W5130S | 720 | 1326 | 1201 | 365 | 787 | 920 | 80 | 1119 |

| mm | I | J | K | L | M | N | O |
|---|---|---|---|---|---|---|---|
| W575S | 217 | 124 | 1014 | 914 | 278 | 101 | 199 |
| W585S | 217 | 124 | 1015 | 915 | 278 | 103 | 199 |
| W5105S | 224 | 124 | 1099 | 999 | 278 | 105 | 212 |
| W5130S | 224 | 124 | 1099 | 999 | 278 | 103 | 212 |

## 2.1.2 W5180S

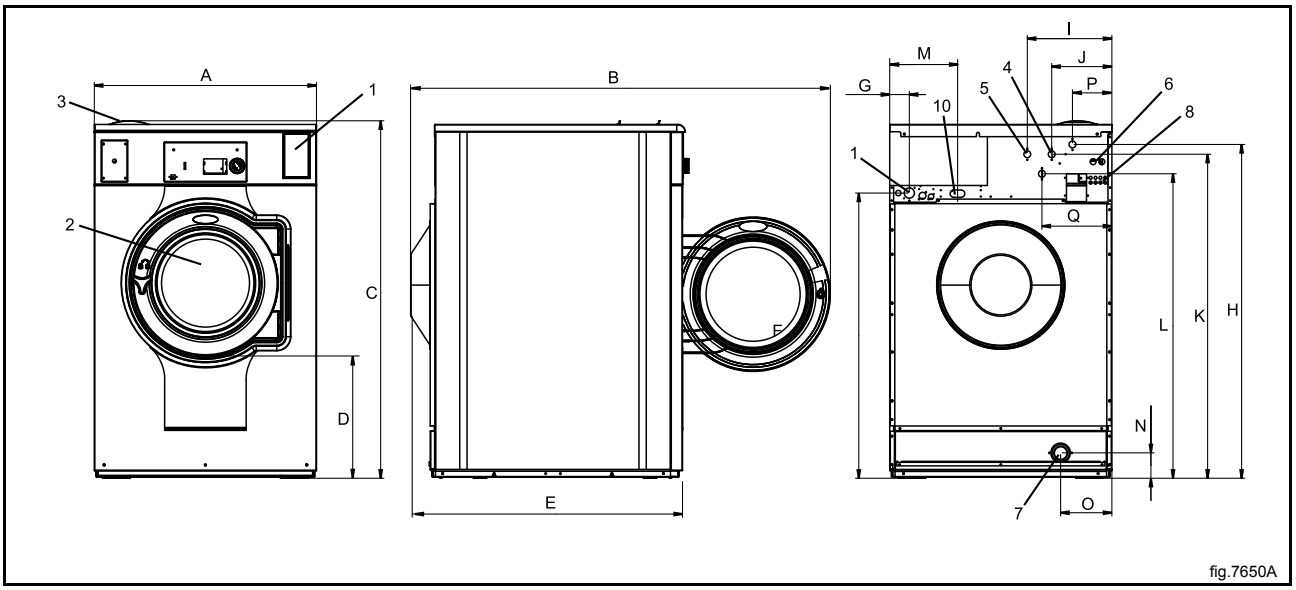



| | |
|---|---|
| 1 | Operating panel |
| 2 | Door opening, W5180S |
| 3 | Detergent container |
| 4 | Cold water |
| 5 | Hot water |
| 6 | Water re-use |
| 7 | Drain valve |
| 8 | Liquid detergent supply |
| 9 | Electrical connection |
| 10 | Steam connection |

| mm | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| W5180S | 751 | 1431 | 1344 | 435 | 875 | 1048 | 81 | 1249 |

| mm | I | J | K | L | M | N | O | P |
|---|---|---|---|---|---|---|---|---|
| W5180S | 297 | 132 | 1229 | 1129 | 278 | 104 | 231 | 217 |

### 2.1.3 W5250S, W5330S




| | |
|---|---|
| 1 | Operating panel |
| 2 | Door opening, W5250S, W5330S: ⌀ 435 mm |
| 3 | Detergent container |
| 4 | Cold water |
| 5 | Hot water |
| 6 | Water re-use |
| 7 | Drain valve |
| 8 | Liquid detergent supply |
| 9 | Electrical connection |
| 10 | Steam connection |

| mm | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| W5250S | 830 | 1594 | 1425 | 470 | 949 | 1129 | 80 | 1328 |
| W5330S | 910 | 1679 | 1464 | 500 | 1034 | 1034 | 80 | 1367 |

| mm | I | J | K | L | M | N | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|
| W5250S | 327 | 233 | 1288 | 1203 | 278 | 100 | 264 | 162 | 287 |
| W5330S | 347 | 247 | 1327 | 1247 | 278 | 104 | 210 | 162 | 287 |

## 2.2 Technical data

| | | W575S | W585S | W5105S | W5130S | W5180S | W5250S | W5330S |
|---|---|---|---|---|---|---|---|---|
| Weight, net | kg | 129 | 135 | 145 | 175 | 228 | 287 | 330 |
| Drum volume | litres | 75 | 85 | 105 | 130 | 180 | 250 | 330 |
| Drum diameter | mm | 520 | 520 | 595 | 595 | 650 | 725 | 795 |
| Drum speed during wash | rpm | 49 | 49 | 49 | 49 | 44 | 44 | 42 |
| Drum speed during extraction | rpm | 830 | 830 | 776 | 776 | 742 | 702 | 641 |
| G-factor, max. | | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| Heating: Electricity | kW | 5.4 | 5.4 | 5.4 | 7.5 | 13 | 18 | 23 |
| | kW | 7.5 | 7.5 | 7.5 | 10 | | | |
| | kW | | | 10 | | | | |
| Heating: Steam | | x | x | x | x | x | x | x |
| Heating: Hot water | | x | x | x | x | x | x | x |
| Frequency of the dynamic force | Hz | 13.8 | 13.8 | 12.9 | 12.9 | 12.4 | 11.7 | 11.2 |
| Floor load at max extraction | kN | 1.6 ± 2.4 | 1.7 ± 2.6 | 1.9 ± 3.0 | 2.3 ± 3.8 | 3.0 ± 4.8 | 3.8 ± 5.9 | 4.3 ± 6.9 |

## 2.3 Connections

| | | W575S | W585S | W5105S | W5130S | W5180S | W5250S | W5330S |
|---|---|---|---|---|---|---|---|---|
| Water valves | DN<br>BSP | 20<br>3/4” | 20<br>3/4” | 20<br>3/4” | 20<br>3/4” | 20<br>3/4” | 20<br>3/4” | 20<br>3/4” |
| Recommended water pressure | kPa | 200–600 | 200–600 | 200–600 | 200–600 | 200–600 | 200–600 | 200–600 |
| Functioning limits for water valve | kPa | 50–1000 | 50–1000 | 50–1000 | 50–1000 | 50–1000 | 50–1000 | 50–1000 |
| Capacity at 300 kPa | l/min | 20 | 20 | 20 | 20 | 30 | 60 | 60 |
| Drain valve<br>⌀ outer | mm | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| Draining capacity | l/min | 170 | 170 | 170 | 170 | 170 | 170 | 170 |
| Steam valve connection | DN<br>BSP | 15<br>1/2” | 15<br>1/2” | 15<br>1/2” | 15<br>1/2” | 15<br>1/2” | 15<br>1/2” | 15<br>1/2” |
| Recommended steam pressure | kPa | 300–600 | 300–600 | 300–600 | 300–600 | 300–600 | 300–600 | 300–600 |
| Functioning limits for steam valve | kPa | 50–800 | 50–800 | 50–800 | 50–800 | 50–800 | 50–800 | 50–800 |

## 2.4 Sound levels

The sound power level of the machine is determined by using ISO 3747:2012.

According to test code IEC 60704-2-4 the sound power level at extraction and during washing are according to the table:

| | | W575S | W585S | W5105S | W5130S | W5180S | W5250S | W5330S |
|---|---|---|---|---|---|---|---|---|
| Wash | dB(A) | 64 | 64 | 63 | 63 | 70 | 67 | 68 |
| Extraction | dB(A) | 75 | 75 | 71 | 72 | 74 | 76 | 75 |

# 3 Setup

## 3.1 Unpacking

**Note!**

**For W5130S-W5330S two persons are recommended for the unpacking.**

The machine is delivered complete with expander bolts etc.

The machine is delivered bolted onto the transport pallet and packed in a crate or box.

Remove packing from the machine.

Remove the front and rear panel.

Remove the bolts between the machine and pallet. There is one to the right in the front of the machine and another diagonally opposed to it, at the back of the machine.

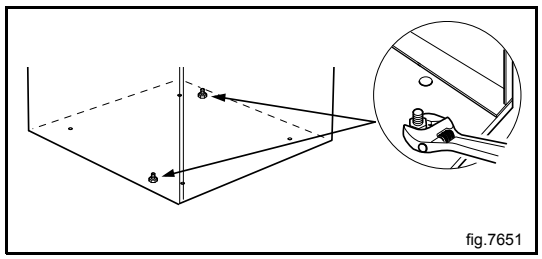


fig.7651

Remove the machine from the pallet.

**Note!**

**When moving the machine, handle it with care.**

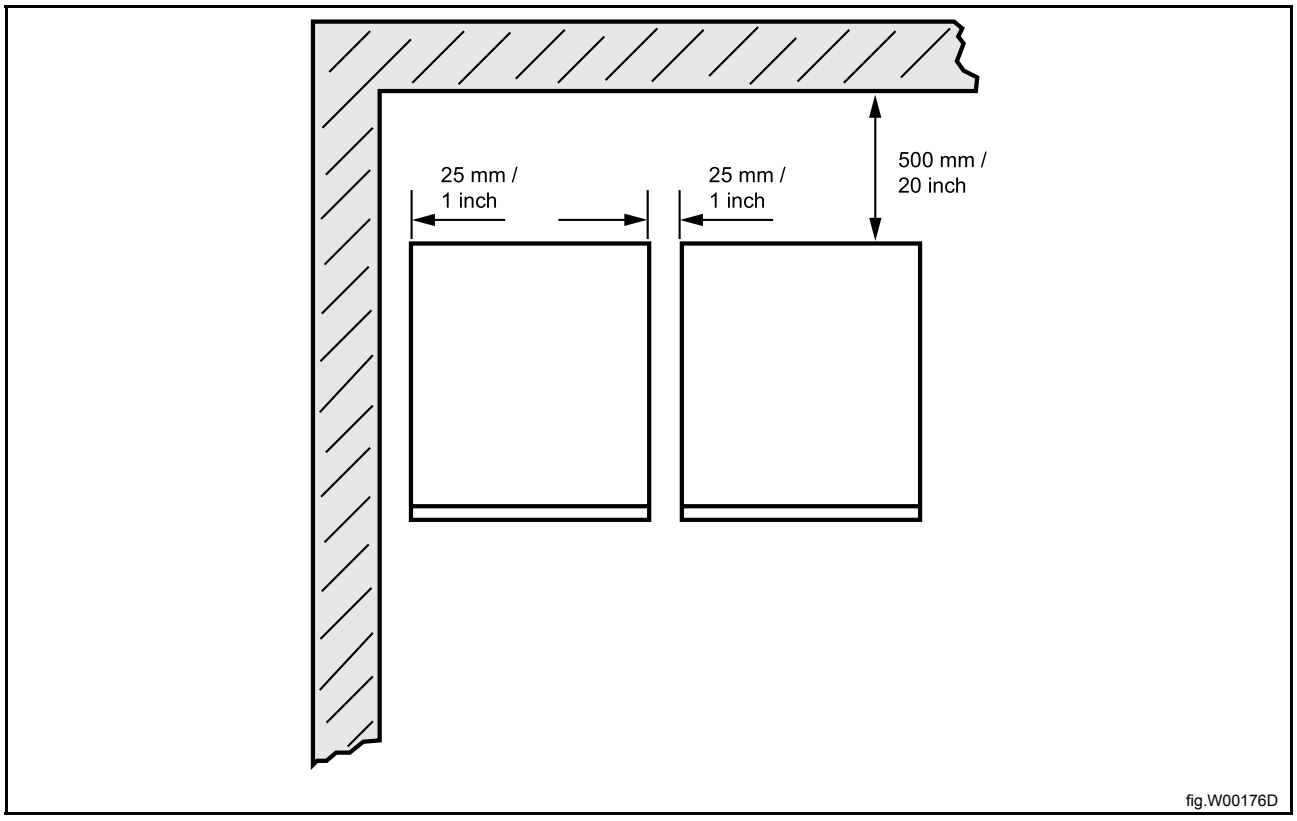
Place the machine on its final position.

## 3.2 Siting

Install the machine close to a floor drain or open drain.

The machine should be positioned so that there is plenty of room for working, both for the user and service personnel.

The figure shows minimum distance to a wall and/or other machines.



## 3.3 Mechanical installation

If the machine is not to be mounted on a base the machine must be fastened to the floor.

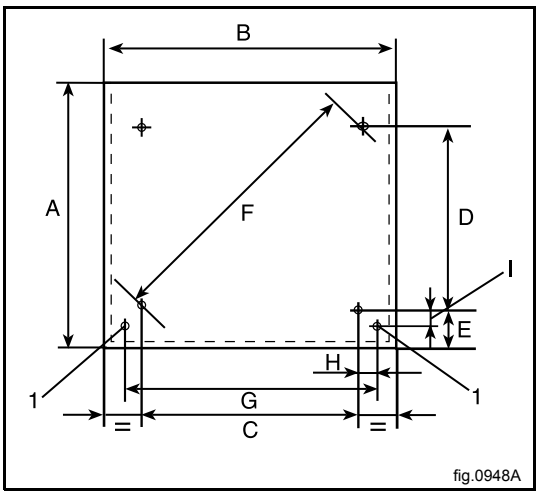
The table shows the correct drilling points.

Mark and drill four holes in the positions shown.

**Note!**

**Two expander bolts MUST also be fitted to the front section of the machine. If not, large vibrations in the machine cabinet may occur.**

Mark and drill two holes (⌀ 10 mm) about 40 mm deep (1) for the expander bolts in the positions shown.




| mm | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|
| W575S | 685 | 660 | 495 | 395 | 115 | 635 | 495 | - | 75 |
| W585S | 725 | 660 | 495 | 445 | 115 | 665 | 495 | - | 75 |
| W5105S | 700 | 720 | 575 | 385 | 120 | 695 | 595 | 10 | 80 |
| W5130S | 785 | 720 | 575 | 495 | 120 | 760 | 595 | 10 | 80 |
| W5180S | 875 | 750 | 635 | 570 | 120 | 855 | 655 | 10 | 85 |
| W5250S | 950 | 830 | 715 | 635 | 125 | 955 | 740 | 10 | 85 |
| W5330S | 1035 | 910 | 790 | 695 | 135 | 1050 | 810 | 10 | 95 |

After the machine has been placed over the other four bolts, place the two spacer washers over the two holes. They shall be placed between the machine and foundation.

Insert the expansion bolts supplied into all of the holes drilled in the floor. Fit the washers and nuts and tighten well.

Level the machine by using stainless or galvanized steel washers between the machine and the floor. The washers must be of a size to cover the support surface. Fit the washers and self-locking nuts supplied with the machine and tighten well. To tighten the nuts it is recommended to use a rachet wrench, especially in the right rear corner.

**It is of the upmost importance that the machine is placed in level, from side to side as well as front to rear. If the machine is not properly levelled, it may result in out-of-balance without a real out of balance in the drum.**

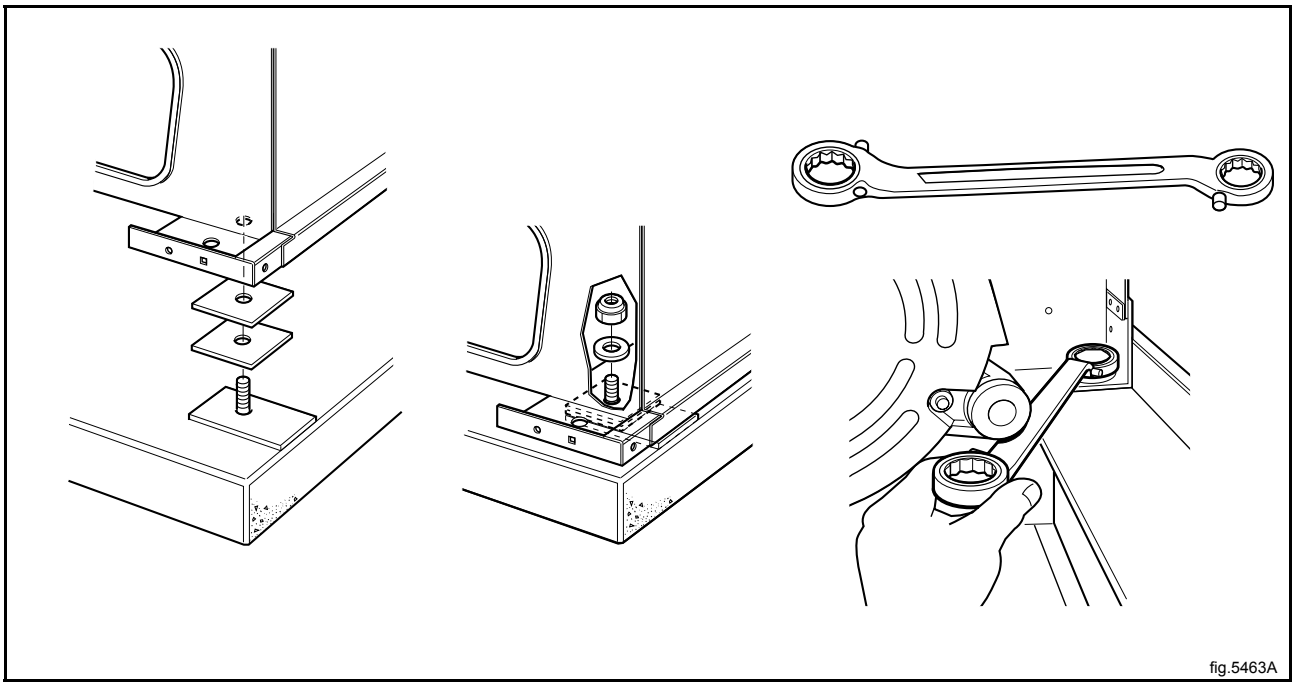


fig.5463A

After the machine has been in use for a while, check and re-tighten the nuts if necessary.

**Floor**

In this type of machine, the drum is attached directly to the frame. As a result the floor under the machine must be stable enough to absorb the dynamic forces generated during spin cycles. For that reason, the mounting bolts must be cast into the floor material itself.

When fixing the machine to an existing cement floor, it must be and at least 100 mm thick. If the floor is less than 100 mm thick, an alternative might be to cast a plinth.

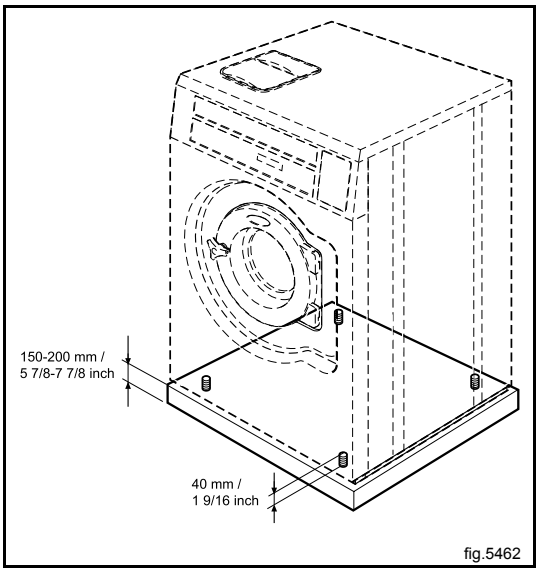
The floor must be able to withstand the loads indicated in the technical data table.

If it isn’t possible to cast the bolts into the floor, an alternative might be to use so-called chemical anchors.

### 3.3.1 Casting a plinth

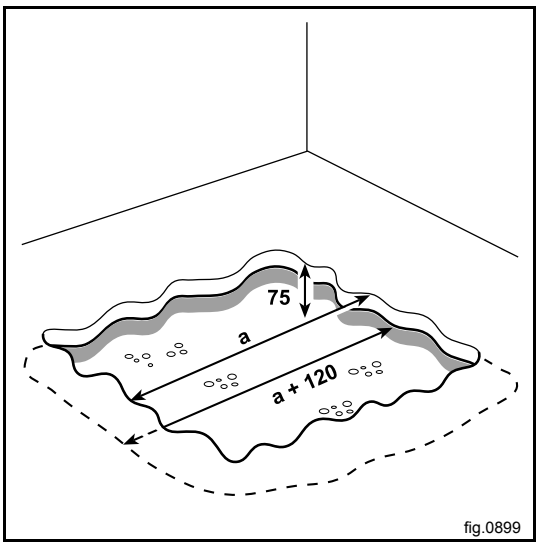
A plinth should be used where the existing floor is less than 100 mm thick or in order to ensure that the machine is above the level of any water leakages.

The plinth should be approximately 150 - 200 mm in height.




Proceed as follows:

- Break up the existing floor to a depth of approx. 75 mm and check that the sides of the hole are tapered outward so that the longest side at the bottom measures 120 mm more than at the top.




- Make the mould for the plinth.
- Moisten the hole well and apply cement to the sides and bottom.
- 4 bolts must be set into the concrete of the machine base. The bolts need to project 40 mm out of the base. Pour the concrete into the prepared base mould and make sure that the surface is level. Check the previous table for the correct position of the bolts.
- The concrete should be left to set for at least two days before mounting the machine on the plinth.

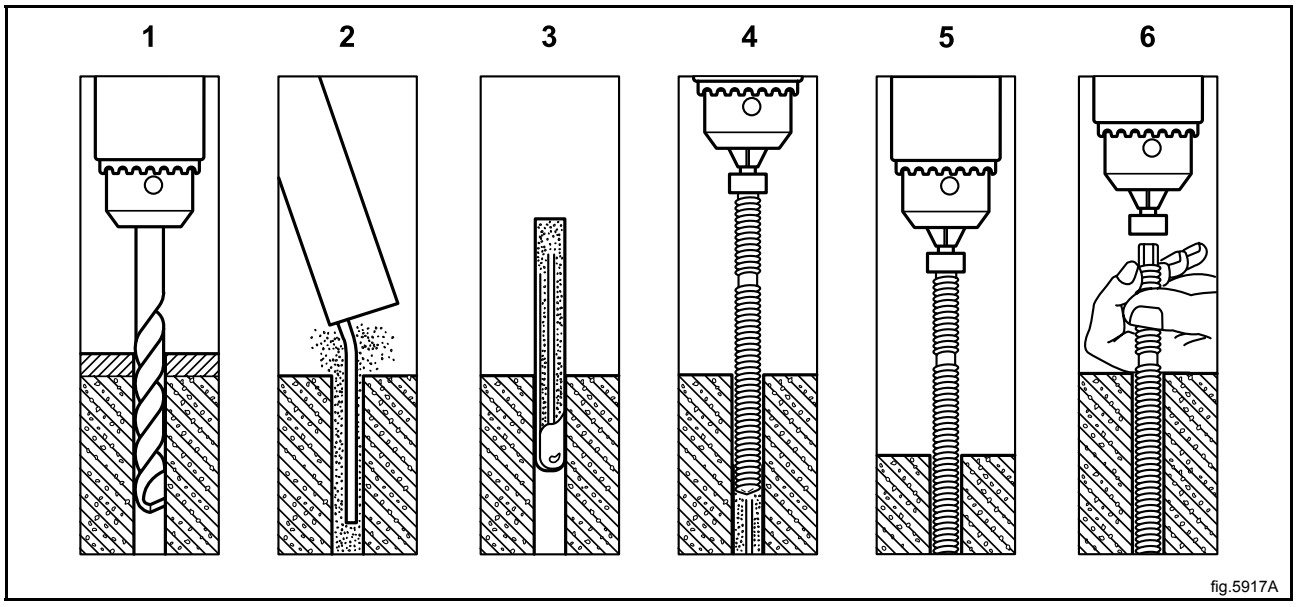
### 3.3.2 Chemical bolts

An alternative to breaking up the existing floor or foundation is to use chemical bolts M16.

1. Mark and drill four holes (⌀ 18 mm) 125 mm deep for the chemical bolts.
   Check the previous table for the correct position of the holes.
2. Clean the drilled holes.
3. Put down the chemical ampule in the hole.
4. Rotate the bolt into the hole, so that the glass ampule is broken and its contents mixed.
5. Rotate the bolt to correct depth.

   **Note!**

   **Do not rotate the bolt against the concrete bottom. Check that the chemicals have filled the hole completely.**
6. Remove the drilling machine with the mounting tool. Hold the bolt with one hand. Let the bolt harden before the machine is mounted.




Time for hardening, due to different concrete temperatures:
– 10°C: 6 hours
– 5°C: 2.5 hours
± 0°C: 1 hour
5°C: 30 minutes
10°C: 20 minutes
15°C: 15 minutes
20°C: 10 minutes

### 3.3.3 Chemical anchors

If installation shall be done on vinyl floor coverings chemical anchors shall be used.

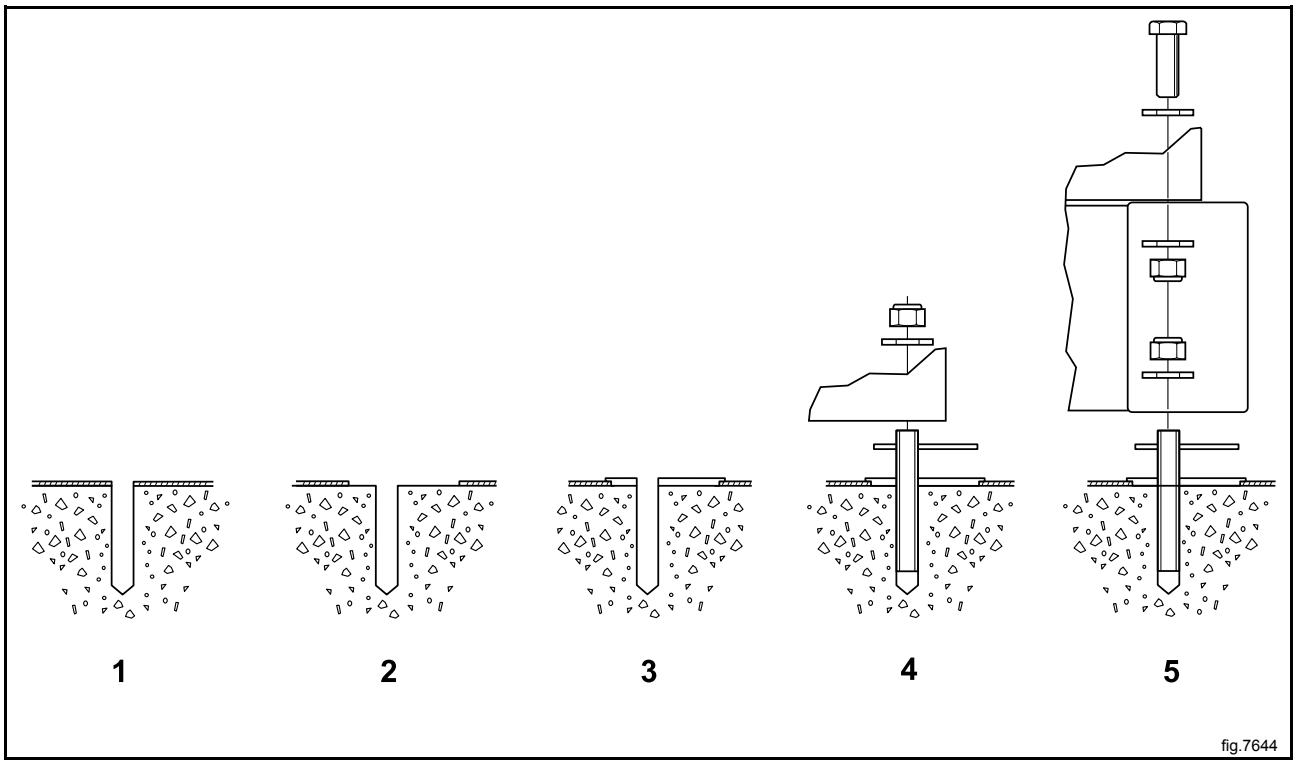
1. Mark and drill four holes for the chemical anchors.

   Check the previous table for the correct position of the holes.
2. Cut the flooring material around the washers
3. Apply sealant to the hole cut in the vinyl floor covering. Insert the washer. Use sealant to seal around the washer between the vinyl and the washer.
4. Put the machine into place.

   Check that the machine is in level. If it is not, use spacers where required between floor and machine.

   If chemical anchors are used, do not use the nut and washer supplied with them.

   Fix the machine in place using the washers and nuts supplied with the machine.
5. Installation with mounting frame.



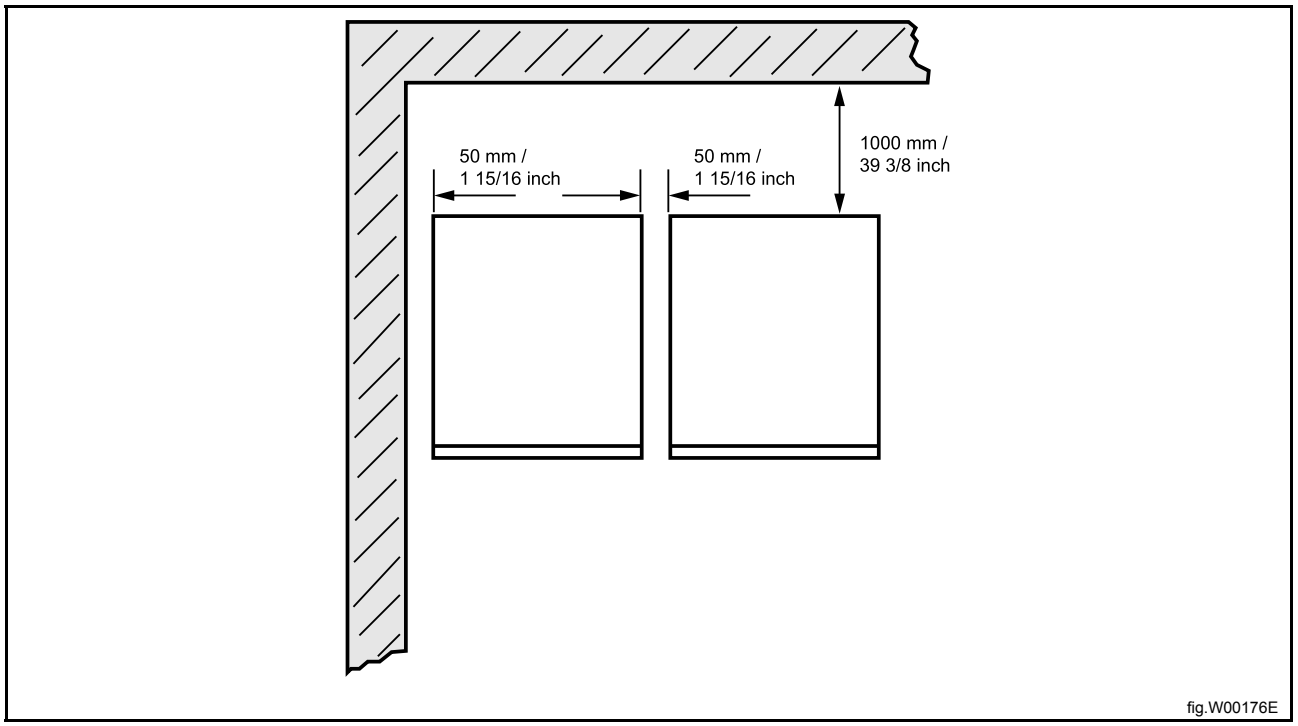
# 4 Marine installation

## 4.1 Siting

Install the machine close to a floor drain or open drain.

The machine should be positioned so that there is plenty of room for working, both for the user and service personnel.

The figure shows minimum distance to a wall and/or other machines.



## 4.2 Mechanical installation

To ensure steadiness of the machine it is important to fasten the machine to the foundation.

Level the machine by using stainless or galvanized steel washers between the machine and the floor. The washers must be of a size to cover the support surface. Fit the washers and self-locking nuts supplied with the machine and tighten well. To tighten the nuts it is recommended to use a rachet wrench, especially in the right rear corner.

**It is of the upmost importance that the machine is placed in level, from side to side as well as front to rear. If the machine is not properly levelled, it may result in out-of-balance without a real out of balance in the drum.**

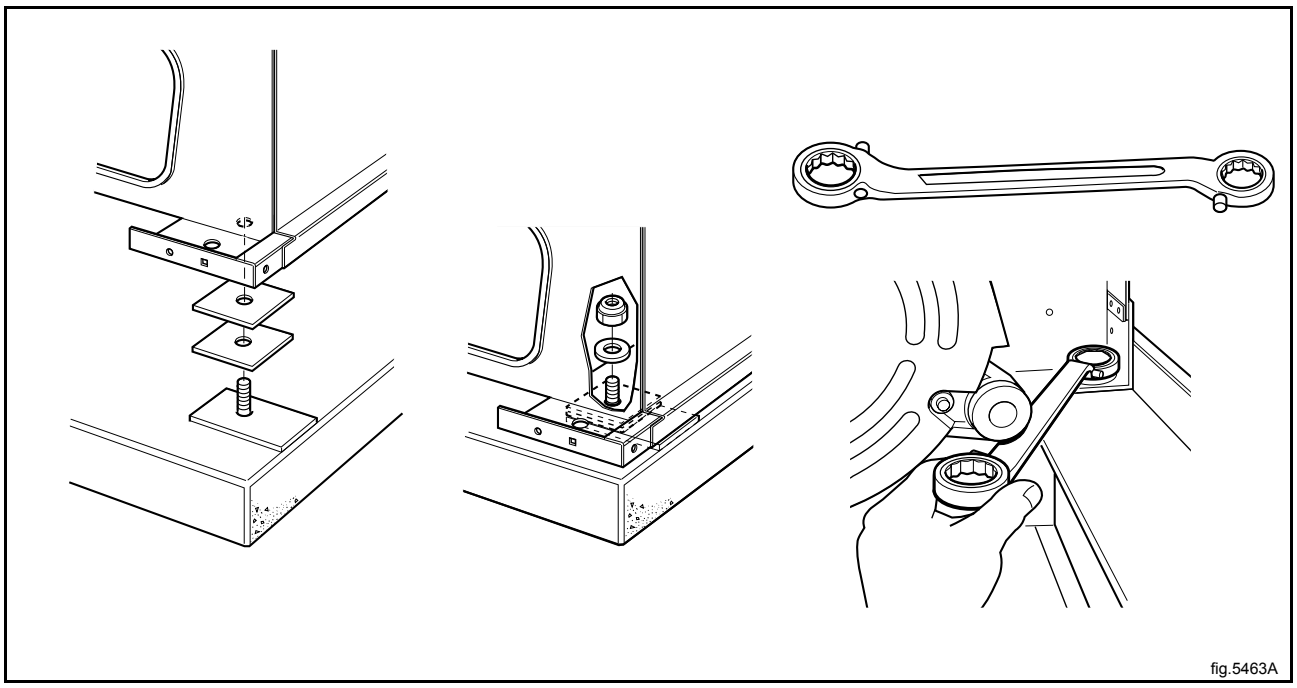


fig.5463A

After the machine has been in use for a while, check and re-tighten the nuts if necessary.

### Floor

In this type of machine, the drum is attached directly to the frame. As a result the deck under the machine must be stable enough to absorb the dynamic forces generated during spin cycles.

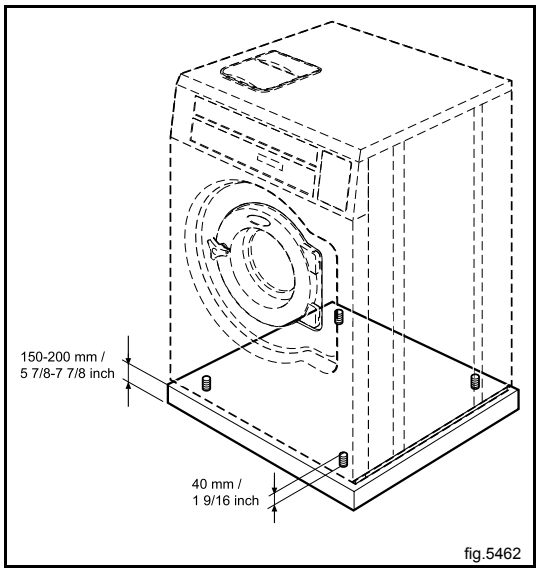
The combination deck and foundation must be able to withstand the loads indicated in the technical data table.

Some marine installations have very thin decks. Special attention to be taken. Reinforcing deck plus increased size of foundation may be necessary.

### 4.2.1 Casting a plinth

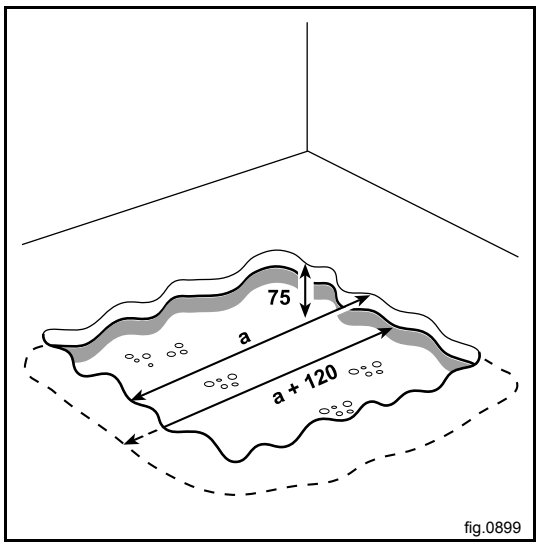
A plinth should be used where the existing floor is less than 100 mm thick or in order to ensure that the machine is above the level of any water leakages.

The plinth should be approximately 150 - 200 mm in height.




Proceed as follows:

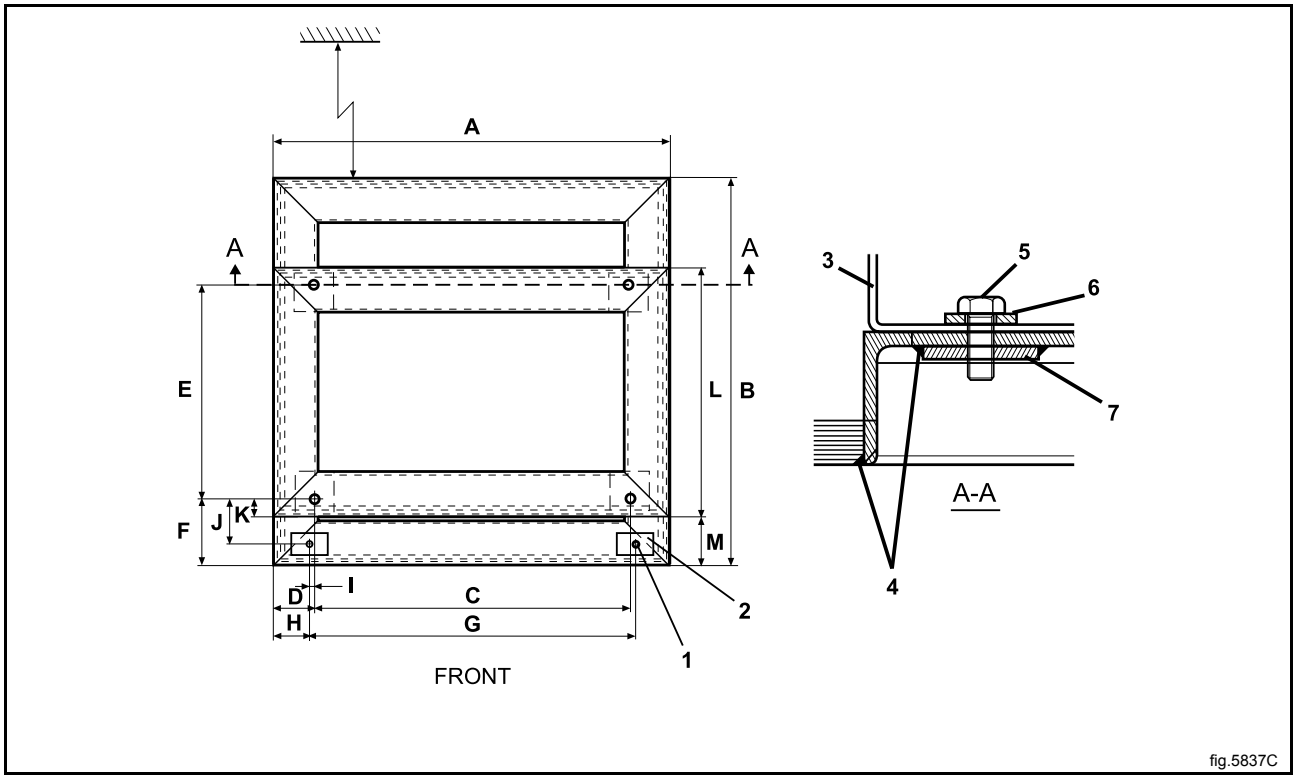
- Break up the existing floor to a depth of approx. 75 mm and check that the sides of the hole are tapered outward so that the longest side at the bottom measures 120 mm more than at the top.




- Make the mould for the plinth.
- Moisten the hole well and apply cement to the sides and bottom.
- 4 bolts must be set into the concrete of the machine base. The bolts need to project 40 mm out of the base. Pour the concrete into the prepared base mould and make sure that the surface is level. Check the previous table for the correct position of the bolts.
- The concrete should be left to set for at least two days before mounting the machine on the plinth.

### 4.2.2 Welding a foundation

A welded foundation shall be made where a concrete foundation can not be made.




| mm | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| W575S | 660 | 685 | 495 | 80 | 395 | 115 | - | - |
| W585S | 660 | 725 | 495 | 80 | 445 | 115 | 495 | 80 |
| W5105S | 720 | 700 | 575 | 75 | 385 | 120 | 595 | 65 |
| W5130S | 720 | 785 | 575 | 75 | 495 | 120 | 595 | 65 |
| W5180S | 750 | 875 | 635 | 55 | 570 | 120 | 655 | 45 |
| W5250S | 830 | 950 | 715 | 55 | 635 | 125 | 740 | 45 |
| W5330S | 910 | 1035 | 790 | 60 | 695 | 135 | 810 | 50 |

| mm | I | J | K | L | M |
|---|---|---|---|---|---|
| W575S | - | - | 30 | 455 | 85 |
| W585S | - | 75 | 30 | 505 | 85 |
| W5105S | 10 | 80 | 30 | 445 | 85 |
| W5130S | 10 | 80 | 30 | 555 | 85 |
| W5180S | 10 | 85 | 30 | 630 | 90 |
| W5250S | 10 | 85 | 30 | 695 | 95 |
| W5330S | 10 | 95 | 30 | 755 | 105 |

# 5 Water connection

All water intake connections to the machine should be fitted with manual shut-off valves and filters, to facilitate installation and servicing.

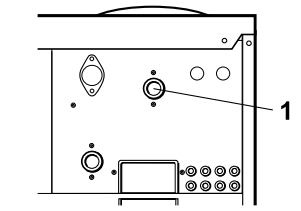
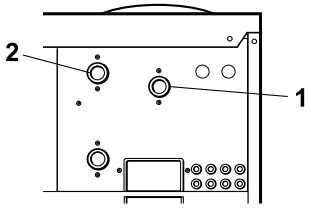
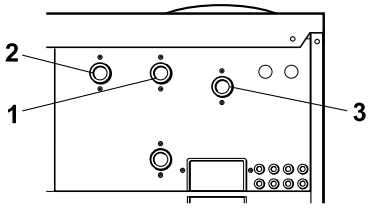
Water pipes and hoses should be flushed clean before installation.

The machine shall be connected with new water hoses. Re-used water hoses must not be used.

Hoses are to be of an approved type and grade and comply with IEC 61770.

After installation hoses must hang in gentle arcs.

All connectors present on the machine must be connected. The table shows the possible connection options, which will depend on the water types to be connected to the machine. Information is also available on the panel above the connections.

| | **Water type** | **Water connection** |
|---|---|---|
|  | W575S, W585S<br>• Cold | W575S, W585S<br>1. Cold |
|  | W575S, W585S, W5105S, W5130S<br>• Cold and hot | W575S, W585S, W5105S, W5130S<br>1. Cold<br>2. Hot |
|  | W5180S, W5250S, W5330S<br>• Cold and hot | W5180S, W5250S, W5330S<br>1. Cold<br>2. Hot<br>3. Cold (for detergent container) / Hot |

There is also an extra water valve which can be used for hard water if soft water is connected to 1. This valve can also be used for water re-use from tank.
If pump is used, it is only a water connection without valve.

Water pressure:

Miniumum: 50 kPa (0.5 kp/cm$^2$)

Maximum: 1 MPa (10 kp/cm$^2$)

Recommended: 200–600 kPa (2–6 kp/cm$^2$)

**Note!**

**If the water pressure is below the minimum value, the wash result can not be guaranteed for certain program.**

# Water connection

For installations in UK:
WRAS-approved machines must be equipped with check valves on both cold and hot water inlet.

# 6 Connection of external dosing systems

## 6.1 Connection of the hoses

The machine is prepared for connection of external dosing systems or water re-use systems etc.

The connections are closed at delivery. Open any of the connections that shall be used by drilling a hole where the hoses shall be connected.

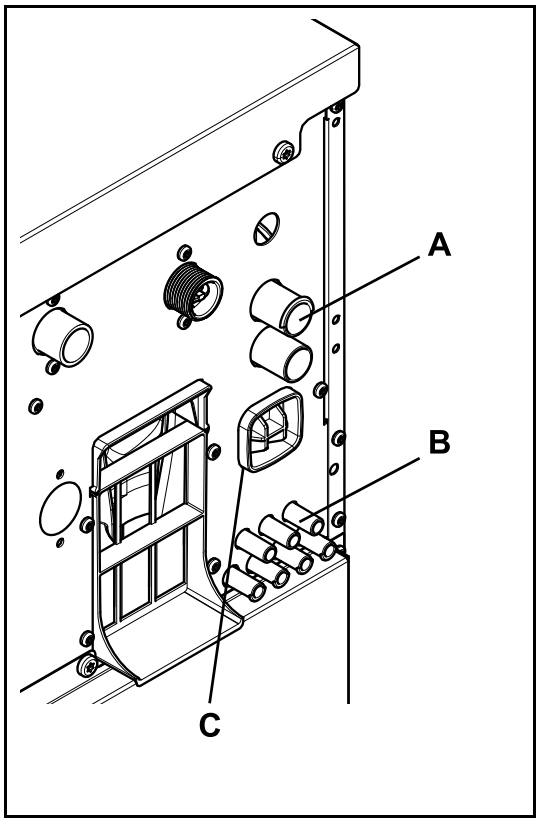
**Note!**

**Make sure there is no burrs left after drilling. When removing burrs make sure burrs does not fall into the siphon breaker.**

A = ⌀ 17 mm (used for external dosing systems or systems for re-use of water).

B = ⌀ 6 mm (used for external dosing systems only).

C = Only used for external liquid manifold. (Separate instructions enclosed when ordering).




Always connect hoses on connections A with a hose clamp.

For connections B; if the hoses are made of a soft material such as silikon or similair, use a cable tie to fasten the hose on the connection. If the hoses are made of a hard material, it is not recommended to make the connection tighter by using a cable tie.

**Note!**

**Equipment for external dosing must only be connected to work on pump pressure and not on network pressure.**

## 6.2 Electrical connection of external dosing system

**The power supply to the external dosing system must never be connected to the machine's incoming terminal block or to the edge connectors on the I/O-board.**

### 6.2.1 Machine with connectors

Connect the external dosing system to connections A and B on the machine.

Connect the signal cable to B and the power supply to A.

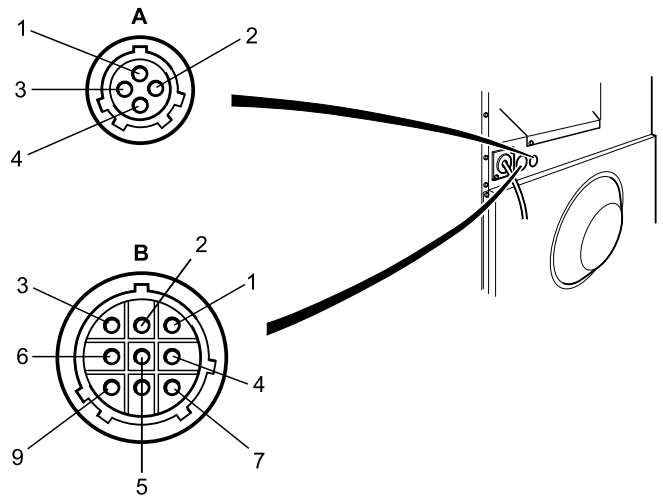



fig.6598

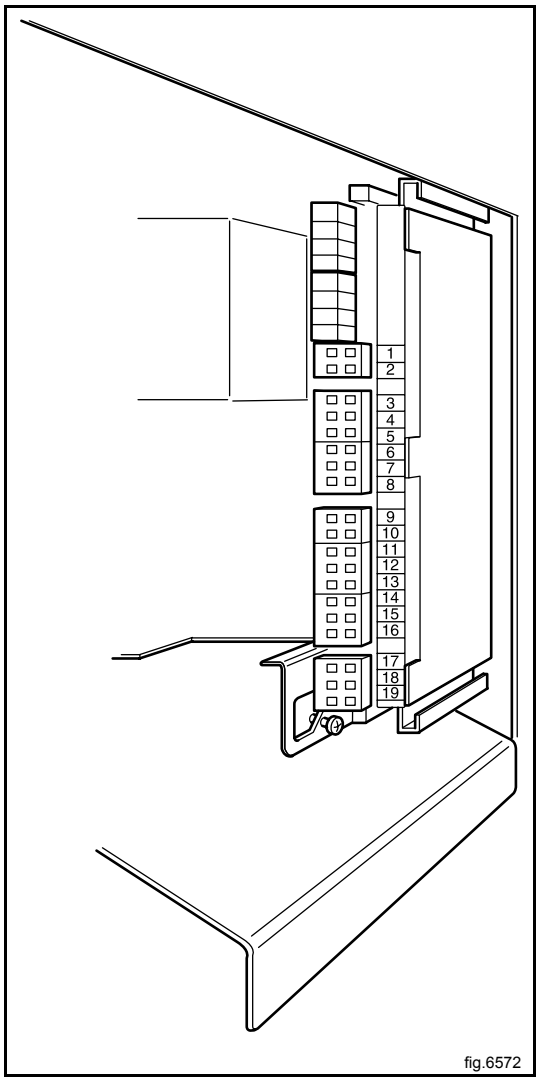
| | |
|---|---|
| 1 | N |
| 2 | L |
| 4 | Ground |
| 11 | N |
| 18 | Program run |
| 12 | Signal 1 |
| 13 | Signal 2 |
| 14 | Signal 3 |
| 15 | Signal 4 |
| 16 | Signal 5 |

### 6.2.2 Machine without connectors

Connect the external dosing system to the I/O board, which is located to the right of the incoming power supply.

The I/O board has edge connectors for connecting external dosing systems.

Edge connectors on the I/O board can be loosened for connecting cables.




11 = N
18 = Program run
12 = Signal 1
13 = Signal 2
14 = Signal 3
15 = Signal 4
16 = Signal 5

### 6.2.3 Outputs

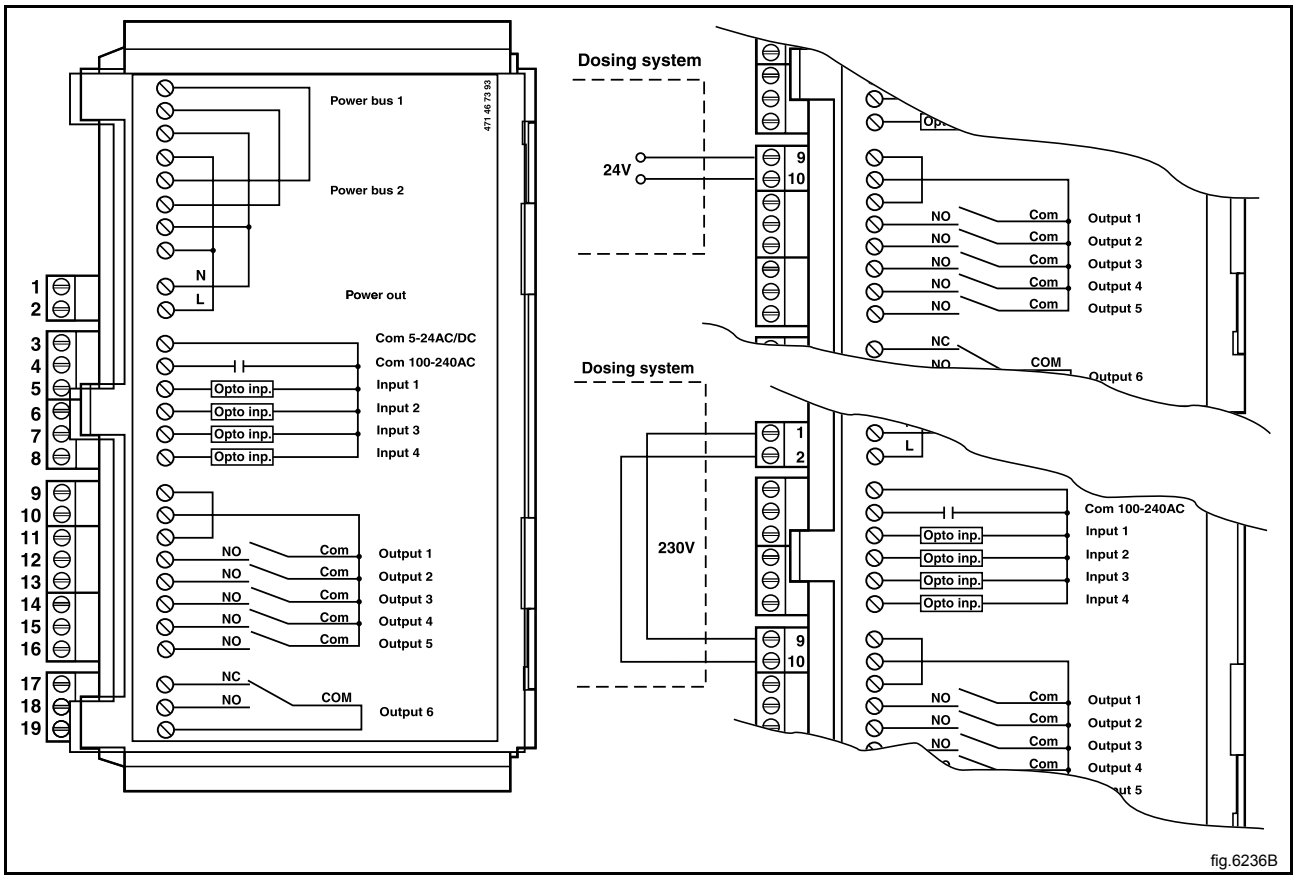
Connect the power supply (e.g. 24V DC) for the external liquid supplies to 9 and 10. If an internal power supply (from the machine) is being used, it can be taken from 1 (N) and connected to 9 and from 2 (L) and connected to 10. Max load on the outputs 0.5 A.

Signals for external liquid supplies 1-5 are connected to 12-16 where connector:

12 = Signal 1
13 = Signal 2
14 = Signal 3
15 = Signal 4
16 = Signal 5

Signals for external liquid supplies 6-10 are connected to 12-16 on the second I/O board type 2:

12= Signal 6
13= Signal 7
14= Signal 8
15= Signal 9
16 = Signal 10



| | 6M14 | 6F01 | 6R01 | 6F02 | Other programs |
|---|---|---|---|---|---|
| Signal 1 | - | Pre-wash | Pre-wash | Pre-wash | Pre-wash |
| Signal 2 | Main wash | Main wash | Main wash | Main wash | Main wash |
| Signal 3 | Softener | Softener | Softener | Softener | Softener |
| Signal 4 | Mop last rinse | Desinfection | Pr 1 last rinse | Mainwash | - |
| Signal 5 | Bleach | Bleach | Bleach | Bleach | Bleach |

### 6.2.4 Inputs

The signal level can be 5-24V DC/AC or 100- 240V AC. For 5-24V, the signal reference is connected to 3 and for 100-240V to 4. Potentials on the inputs cannot be mixed.

**Note!**

**The I/O board will be damaged if the voltage on connection 3 is too high > 24V.**

Connection 8 may be connected if the program is to pause, e.g. while detergent is being dosed.

The figure shows an example of engaging a 24V pause signal. The program will pause for as long as the pause signal remains activated (high).

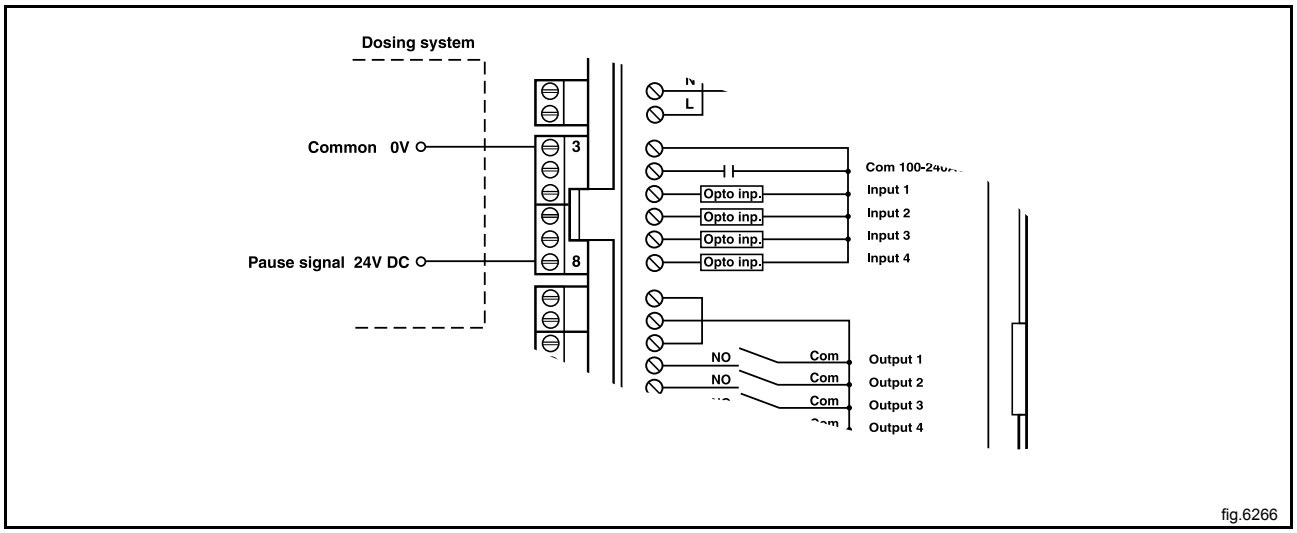



fig.6266

Connection 7. If this is connected, an error message will be displayed if any of the chemical tanks are empty. The program will continue, however.

The figure shows an example of engaging a normal open contact.

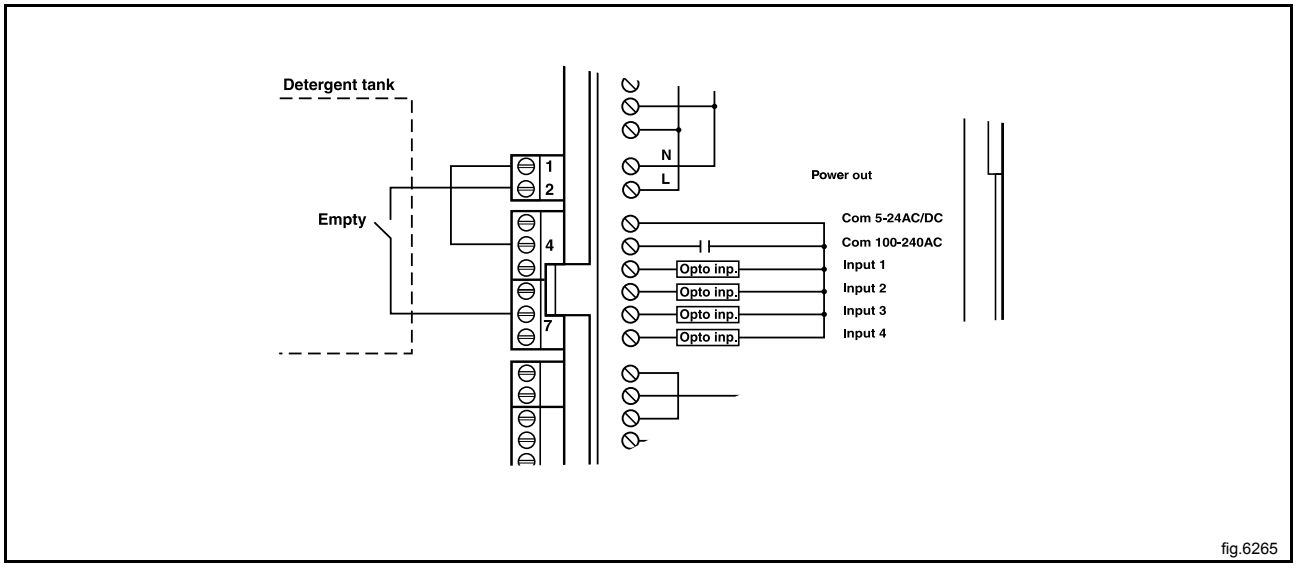



fig.6265

# 7 Drain connection

Connect a 75 mm (50 mm for models W565-W5105) pipe or rubber hose to the machine's drain pipe, ensuring a downward flow from the machine. Avoid sharp bends which may prevent proper draining.

The drainage pipe should be located over a floor drain, drainage channel or the like so that the distance between the outlet and the drain is at least 25 mm.

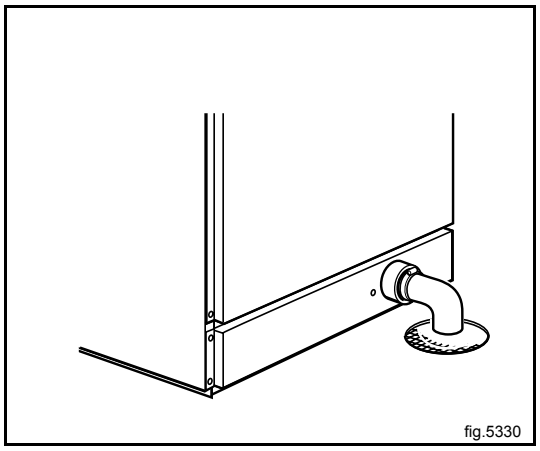


fig.5330

# 8 Electrical connection

## 8.1 Electrical installation

**The electrical installation may only be carried out by qualified personnel.**

**Machines with frequency-controlled motors can be incompatible with certain types of earth leakage circuit breaker. It is important to know that the machines are designed to provide a high level of personal safety, which is why items of external equipment such as earth leakage circuit breakers are not necessary. If you still want to connect your machine across an earth leakage circuit breaker, please remember the following:**

- **contact a skilled, authorised installation company to ensure that the appropriate type of breaker is chosen and that the dimensioning is correct**
- **for maximum reliability, connect only one machine per earth leakage circuit breaker**
- **it is important that the earth wire is properly connected.**

In instances where the machine is not equipped with an omni-polar switch, one must be installed beforehand.

In accordance with the wiring rules: mount a multi-pole switch prior to the machine to facilitate installation and service operations.

The connecting cable should hang in a gentle curve.

When connecting to a terminal block, the connection cable shell must be stripped 10-11 mm. The cable area must be at least 0.5 $mm^2$ and no more than 4 $mm^2$ (AWG12/AWG20). The terminal block used is a spring loaded cage clamp.

Recommended fuse size, see table.

## 8.2 Electrical connections

**W575S**

| Heating alternative | Main voltage | Hz | Heating power kW | Total power kW | Recommended fuse A |
|---|---|---|---|---|---|
| Electric heated | 200V 3 ~ | 50/60 | 5.2 | 5.5 | 20 |
| | 220–240V 1 ~ | 50/60 | 1.7–2.0 | 2.0–2.3 | 16 |
| | 220–240V 1 ~ | 50/60 | 2.5–3.0 | 2.9–3.3 | 16 |
| | 220–240V 1 ~ | 50/60 | 3.7–4.3 | 4.0–4.7 | 25 |
| | 220–240V 1 ~ | 50/60 | 4.5–5.4 | 4.9–5.7 | 25 |
| | 220–240V 1 ~ | 50/60 | 6.3–7.5 | 6.6–7.8 | 35 |
| | 220–240V 3 ~ | 50/60 | 2.5–3.0 | 2.9–3.3 | 10 |
| | 220–240V 3 ~ | 50/60 | 4.0–4.3 | 4.3–4.7 | 16 |
| | 220–240V 3 ~ | 50/60 | 4.5–5.4 | 4.9–5.7 | 16 |
| | 220–240V 3 ~ | 50/60 | 6.3–7.5 | 6.6–7.8 | 25 |
| | 380–415V 3 ~ | 50/60 | 2.5–3.0 | 2.8–3.3 | 10 |
| | 380–415V 3 ~ | 50/60 | 3.6–4.3 | 4.0–4.7 | 10 |
| | 380–415V 3 ~ | 50/60 | 4.5–5.4 | 4.8–5.7 | 10 |
| | 380–415V 3 ~ | 50/60 | 6.3–7.5 | 6.6–7.8 | 16 |
| | 440/480V 3 ~ | 60 | 7.5 | 7.8 | 16 |
| | 415V 3 ~ / 240V 1 ~ | 50/60 | 7.5 / 5.0 | 7.8 / 5.3 | 16 / 25 |
| Non heated/Steam heated | 200V 3 ~ | 50/60 | - | 0.7 | 10 |
| | 208–240V 1 ~ | 50/60 | - | 0.4 | 10 |

**W585S**

| Heating alternative | Main voltage | Hz | Heating power kW | Total power kW | Recommended fuse A |
|---|---|---|---|---|---|
| Electric heated | 200V 3 ~ | 50/60 | 5.2 | 5.5 | 20 |
| | 220–240V 1 ~ | 50/60 | 1.7–2.0 | 2.0–2.3 | 16 |
| | 220–240V 1 ~ | 50/60 | 2.5–3.0 | 2.9–3.4 | 16 |
| | 220–240V 1 ~ | 50/60 | 3.7–4.3 | 4.0–4.7 | 25 |
| | 220–240V 1 ~ | 50/60 | 4.5–5.4 | 4.9–5.8 | 35 |
| | 220–240V 1 ~ | 50/60 | 6.3–7.5 | 6.7–7.9 | 35 |
| | 220–240V 3 ~ | 50/60 | 2.5–3.0 | 2.9–3.4 | 16 |
| | 220–240V 3 ~ | 50/60 | 4.0–4.3 | 4.3–4.7 | 16 |
| | 220–240V 3 ~ | 50/60 | 4.5–5.4 | 4.9–5.8 | 20 |
| | 220–240V 3 ~ | 50/60 | 6.3–7.5 | 6.7–7.9 | 25 |
| | 380–415V 3 ~ | 50/60 | 2.5–3.0 | 2.9–3.3 | 10 |
| | 380–415V 3 ~ | 50/60 | 3.6–4.3 | 4.0–4.7 | 16 |
| | 380–415V 3 ~ | 50/60 | 4.5–5.4 | 4.9–5.7 | 10 |
| | 380–415V 3 ~ | 50/60 | 6.3–7.6 | 6.6–7.8 | 16 |
| | 440/480V 3 ~ | 60 | 7.5 | 7.9 | 16 |
| | 415V 3 ~ / 240V 1 ~ | 50/60 | 7.5 / 5.0 | 7.8 / 5.3 | 16 / 25 |
| Non heated/Steam heated | 200V 3 ~ | 50/60 | - | 0.5 | 10 |
| | 208–240V 1 ~ | 50/60 | - | 0.4 | 10 |

**W5105S**

| Heating alternative | Main voltage | Hz | Heating power kW | Total power kW | Recommended fuse A |
|---|---|---|---|---|---|
| Electric heated | 200V 3 ~ | 50/60 | 5.2 | 5.7 | 20 |
| | 200V 3 ~ | 50/60 | 6.9 | 7.4 | 25 |
| | 220–240V 1 ~ | 50/60 | 2.5–3.0 | 3.0–3.5 | 20 |
| | 220–240V 1 ~ | 50/60 | 4.5–5.4 | 4.9–5.7 | 35 |
| | 220–240V 1 ~ | 50/60 | 6.3–7.5 | 6.8–8.0 | 35 |
| | 220–240V 1 ~ | 50/60 | 8.4–10.0 | 8.8–10.4 | 50 |
| | 220–240V 3 ~ | 50/60 | 2.5–3.0 | 3.0–3.5 | 16 |
| | 220–240V 3 ~ | 50/60 | 4.5–5.4 | 4.9–5.7 | 20 |
| | 220–240V 3 ~ | 50/60 | 6.3–7.5 | 6.8–8.0 | 25 |
| | 220–240V 3 ~ | 50/60 | 8.4–10.0 | 8.8–10.4 | 35 |
| | 380–415V 3 ~ | 50/60 | 2.5–3.0 | 3.0–3.4 | 10 |
| | 380–415V 3 ~ | 50/60 | 4.4–5.8 | 4.8–5.7 | 16 |
| | 380–415V 3 ~ | 50/60 | 6.3–7.5 | 6.7–7.9 | 16 |
| | 380–415V 3 ~ | 50/60 | 8.3–10.0 | 8.8–10.4 | 20 |
| | 440/480V 3 ~ | 60 | 7.5 | 8.0 | 16 |
| | 440/480V 3 ~ | 60 | 10.0 | 10.4 | 20 |
| | 415V 3 ~ /<br>240V 1 ~ | 50/60 | 7.5 /<br>5.0 | 7.9 /<br>5.4 | 16 /<br>25 |
| | 415V 3 ~ /<br>240V 1 ~ | 50/60 | 10.0 /<br>6.7 | 10.4 /<br>6.9 | 20 /<br>35 |
| Non heated/Steam heated | 200V 3 ~ | 50/60 | - | 0.8 | 10 |

**W5130S**

| Heating alternative | Main voltage | Hz | Heating power kW | Total power kW | Recommended fuse A |
|---|---|---|---|---|---|
| Electric heated | 200V 3 ~ | 50/60 | 5.2 | 5.7 | 20 |
| | 200V 3 ~ | 50/60 | 6.9 | 7.4 | 25 |
| | 220–240V 1 ~ | 50/60 | 2.5–3.0 | 3.0–3.5 | 20 |
| | 220–240V 1 ~ | 50/60 | 4.5–5.4 | 5.0–5.9 | 35 |
| | 220–240V 1 ~ | 50/60 | 6.3–7.5 | 6.8–8.0 | 35 |
| | 220–240V 1 ~ | 50/60 | 8.4–10.0 | 8.8–10.4 | 50 |
| | 220–240V 3 ~ | 50/60 | 2.5–3.0 | 3.0–3.5 | 16 |
| | 220–240V 3 ~ | 50/60 | 4.5–5.4 | 5.0–5.9 | 20 |
| | 220–240V 3 ~ | 50/60 | 6.3–7.5 | 6.8–8.0 | 25 |
| | 220–240V 3 ~ | 50/60 | 8.4–10.0 | 8.8–10.4 | 35 |
| | 208–240V 3 ~ | 60 | 7.5–10.0 | 8.0–10.4 | 35 |
| | 380–415V 3 ~ | 50/60 | 2.5–3.0 | 3.0–3.4 | 10 |
| | 380–415V 3 ~ | 50/60 | 4.4–5.2 | 4.8–5.7 | 16 |
| | 380–415V 3 ~ | 50/60 | 6.3–7.5 | 6.7–7.9 | 16 |
| | 380–415V 3 ~ | 50/60 | 8.3–10.0 | 8.8–10.4 | 20 |
| | 440/480V 3 ~ | 60 | 7.5 | 8.0 | 16 |
| | 440/480V 3 ~ | 60 | 10.0 | 10.4 | 20 |
| | 415V 3 ~ / 240V 1 ~ | 50/60 | 7.5 / 5.0 | 7.9 / 5.4 | 16 / 25 |
| | 415V 3 ~ / 240V 1 ~ | 50/60 | 10.0 / 6.7 | 10.4 / 6.9 | 20 / 35 |
| Non heated/Steam heated | 200V 3 ~ | 50/60 | - | 0.8 | 10 |

**W5180S**

| Heating alternative | Main voltage | Hz | Heating power kW | Total power kW | Recommended fuse A |
|---|---|---|---|---|---|
| Electric heated | 200V 3 ~ | 50/60 | 9.0 | 9.5 | 35 |
| | 220–240V 1 ~ | 50/60 | 10.9–13.0 | 11.4–13.5 | 63 |
| | 220–240V 3 ~ | 50/60 | 10.9–13.0 | 11.4–13.5 | 35 |
| | 380–415V 3 ~ | 50/60 | 4.0–4.8 | 4.5–5.3 | 16 |
| | 380–415V 3 ~ | 50/60 | 10.9–12.9 | 11.4–13.4 | 25 |
| | 440/480V 3 ~ | 60 | 13.0 | 13.5 | 25 |
| Non heated/Steam heated | 200V 3 ~ | 50/60 | - | 1.0 | 10 |

**W5250S**

| Heating alternative | Main voltage | Hz | Heating power kW | Total power kW | Recommended fuse A |
|---|---|---|---|---|---|
| Electric heated | 200V 3 ~ | 50/60 | 12.5 | 13.3 | 50 |
| | 220–240V 3 ~ | 50/60 | 9.1–10.8 | 9.8–11.6 | 35 |
| | 220–240V 3 ~ | 50/60 | 15.1–18.0 | 15.9–18.8 | 50 |
| | 380–415V 3 ~ | 50/60 | 9.0–10.8 | 9.8–11.5 | 25 |
| | 380–415V 3 ~ | 50/60 | 15.0–17.9 | 15.8–18.7 | 35 |
| | 440/480V 3 ~ | 60 | 18.0 | 18.8 | 35 |
| Non heated/Steam heated | 200V 3 ~ | 50/60 | - | 1.1 | 10 |

Max. permitted impendance* = 0.26 Ohm

**W5330S**

| Heating alternative | Main voltage | Hz | Heating power kW | Total power kW | Recommended fuse A |
|---|---|---|---|---|---|
| Electric heated | 200V 3 ~ | 50/60 | 14.4 | 15.6 | 50 |
| | 220–230V 3 ~ | 50/60 | 17.5–19.1 | 18.7–20.3 | 63 |
| | 240V 3 ~ | 50/60 | 19.8 | 21.0 | 63 |
| | 220–240V 3 ~ | 50/60 | 19.3–23.0 | 20.5–24.2 | 63 |
| | 380–400V 3 ~ | 50/60 | 17.4–19.2 | 18.6–20.4 | 50 |
| | 415V 3 ~ | 50/60 | 19.7 | 20.9 | 50 |
| | 380–415V 3 ~ | 50/60 | 19.3–23.0 | 20.5–24.3 | 50 |
| | 440V 3 ~ | 60 | 21.0 | 22.1 | 50 |
| | 440V 3 ~ | 60 | 23.0 | 24.1 | 50 |
| | 480V 3 ~ | 60 | 22.8 | 23.9 | 50 |
| | 480V 3 ~ | 60 | 23.0 | 24.1 | 50 |
| Non heated/Steam heated | 200V 3 ~ | 50/60 | - | 1.2 | 10 |
| | 440/480V 3 ~ | 60 | - | 1.4 | 10 |

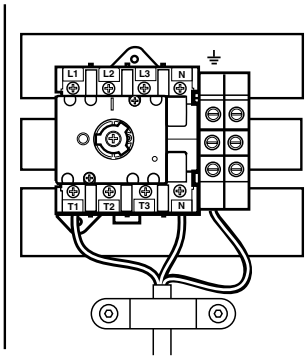
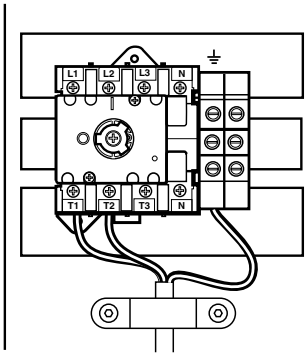
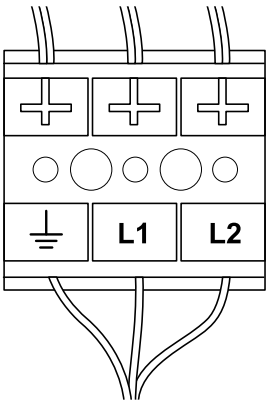
Max. permitted impendance* = 0.26 Ohm

* The impendance in the mains connected point in accordance with EN31000–3–11. If the impendance in the mains connected point is higher than stated, check with the power supplier.

## 8.3 Machine connection

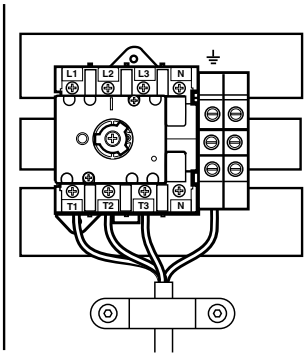
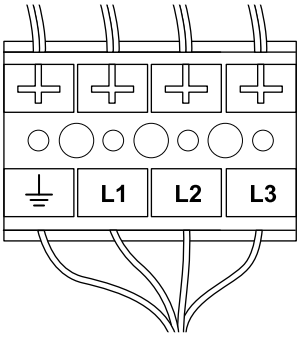
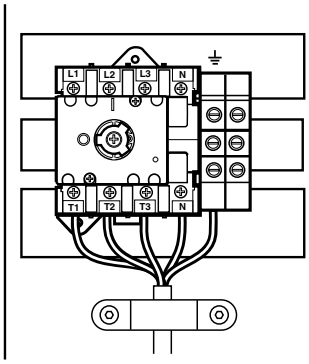
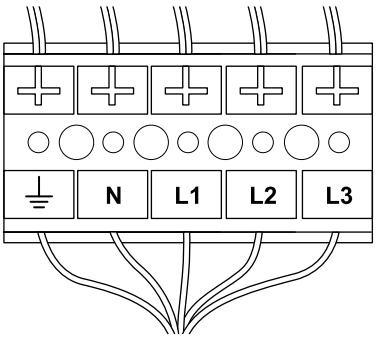
### 8.3.1 Single-phase connection

Connect the earth and other two wires as shown.

| | |
|---|---|
| 1NAC |  |
| 1AC |  |
| 1AC |  |

### 8.3.2 Three-phase connection

Connect the earth, neutral and phase wires as shown.

| | |
|---|---|
| 3AC |  |
| 3AC |  |
| 3N AC |  |
| 3N AC |  |

## 8.4 Functions for I/O-cards

The electrical schematic can be one of the following:

### 8.4.1 External coin meter/Central payment (2A)

The signal received from external coin meters must be a pulse between 300–3000 ms (500 ms is recommended) with a minimum pause of 300 ms (500 ms is recommended) between two pulses.

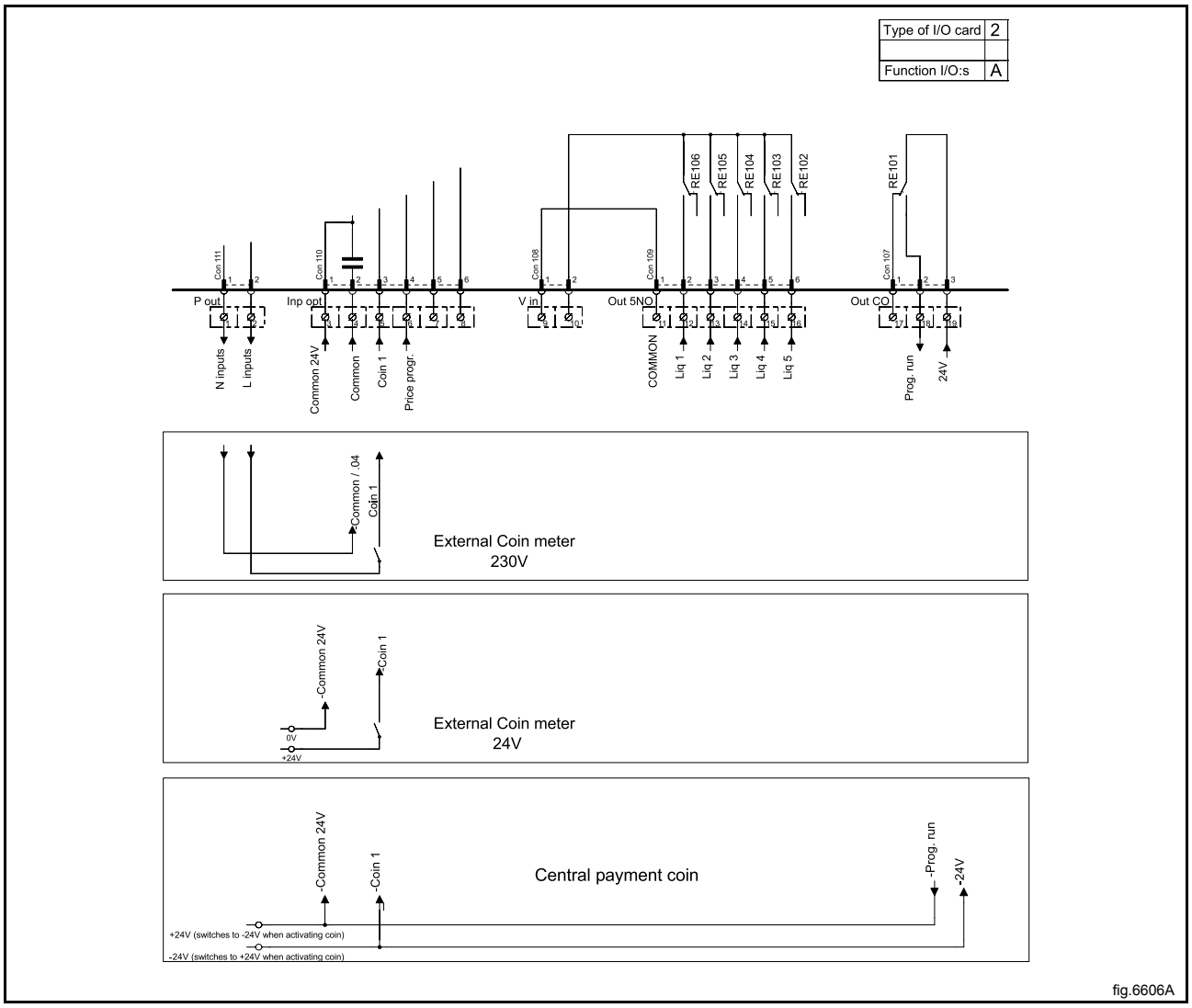



fig.6606A

### 8.4.2 Central payment (2B)

To start the machine from a central payment system, the payment system must transmit a start pulse to the machine. The start pulse can be either 230V or 24V. In order to receive a feedback signal once the machine has started, 230V or 24V must be connected to connection 19. The feedback signal on connection 18 remains active (high) during the entire program.

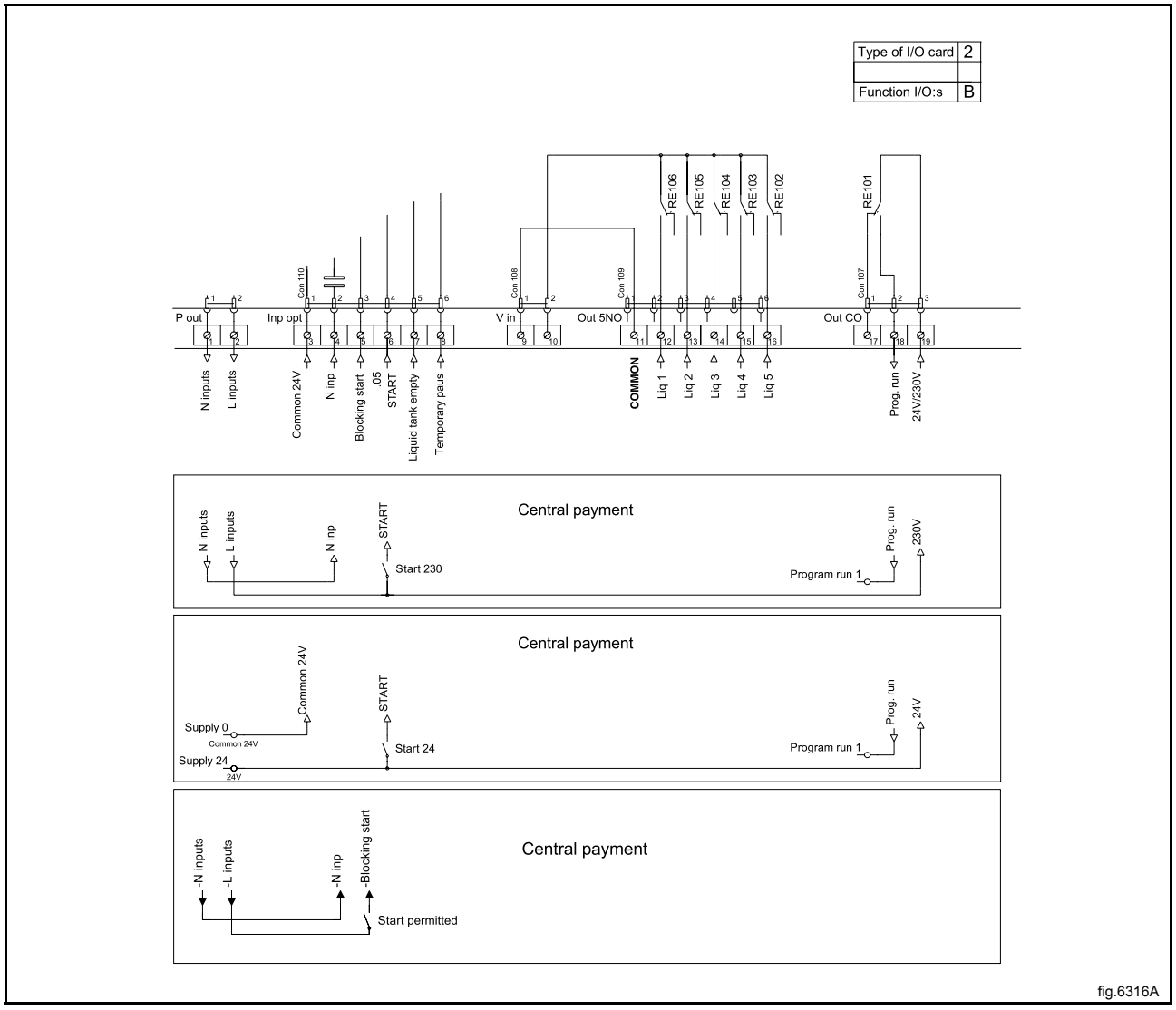



fig.6316A

### 8.4.3 Central payment (2C)

The central payment or booking system shall transmit an active (high) signal to the machine once permission has been granted to start the machine. The signal must remain active (high) until the machine starts. A feedback signal will be present on connection 18 and remain active (high) whilst the machine door is closed but the program has not started. The feedback signal is powered by 230V or 24V from connection 19.

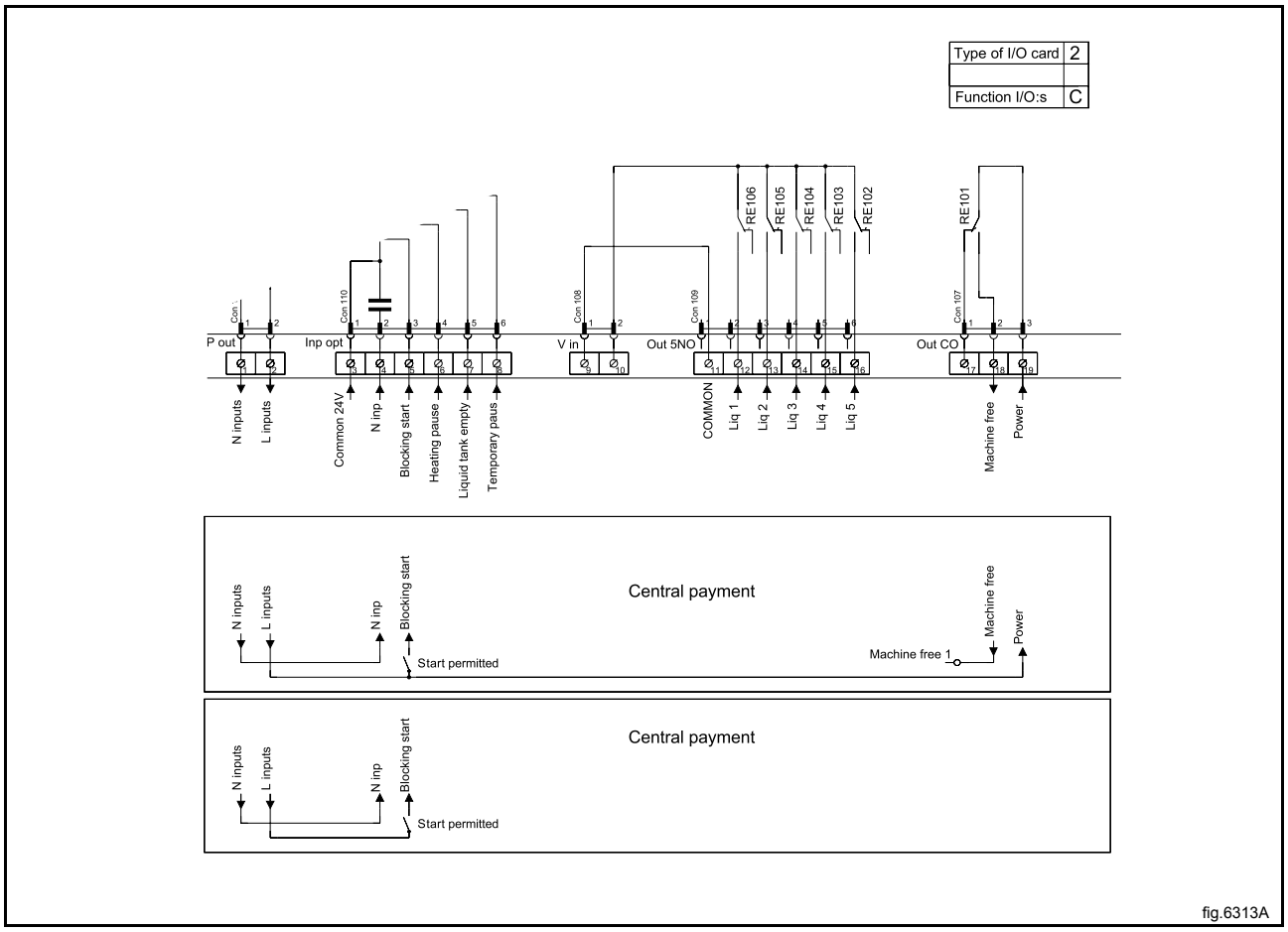



fig.6313A

### 8.4.4 Outputs for detergent signals and inputs for pause signals, "empty" signal and price reduction (2D)

The figure shows standard function addressing for machines with the coin program package.

By maintaining an active (high) signal on connection 5 ("Price red"), the price of the program can be reduced. This function has a number of uses, including providing reductions during a specific period of the day. Whilst the signal remains active (high), the price of the program is reduced by the percentage entered in the price programming menu.

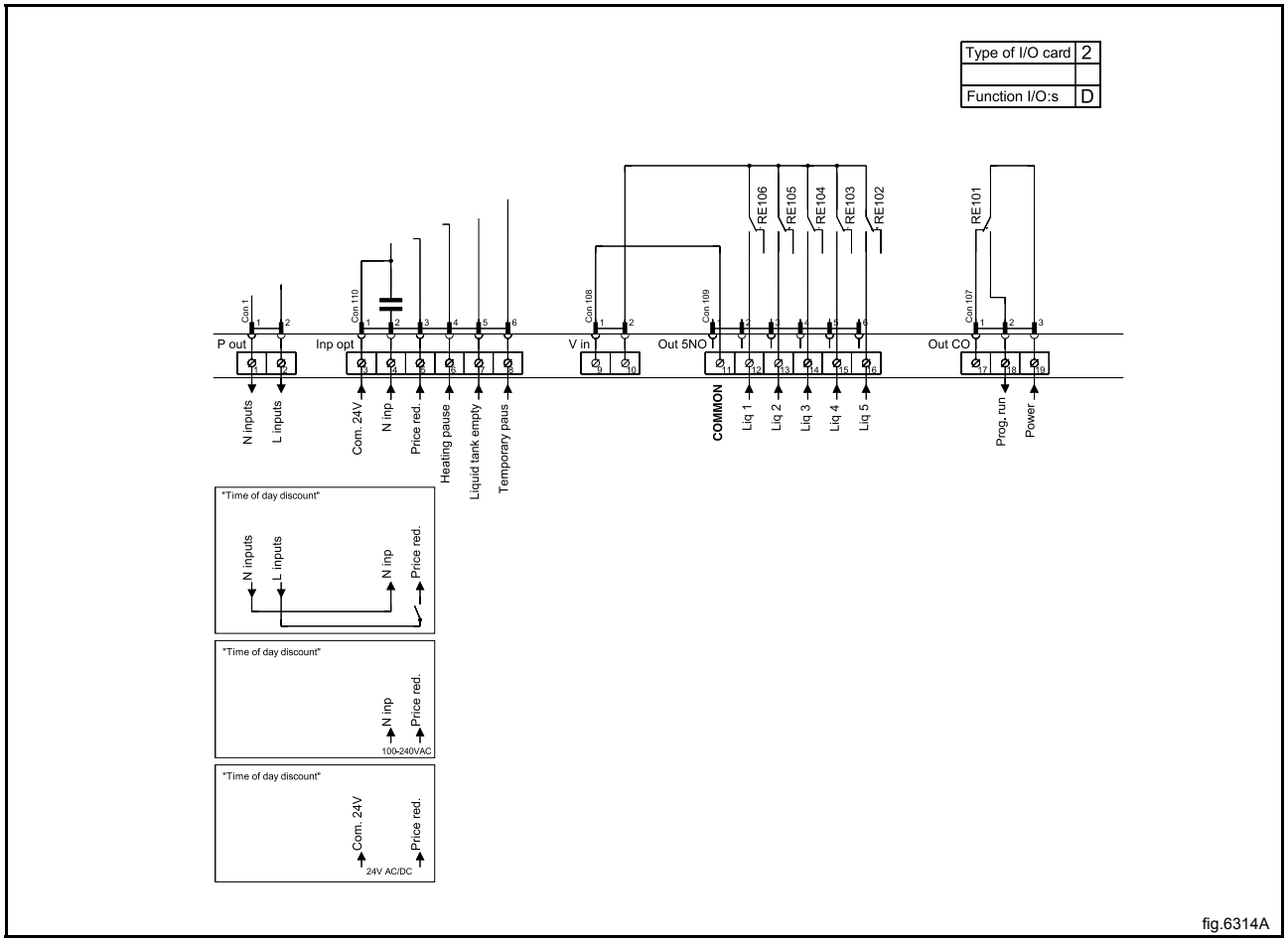



fig.6314A

### 8.4.5 Central booking/payment (2F)

The central payment or booking system shall provide an active (high) signal to the machine once permission has been granted to start the machine. The signal must remain active (high) until the machine starts. A feedback signal will be present on connection 18 and remain active (high) whilst the program is running. The feedback signal is powered by 230V from connection 19 or external 24V.

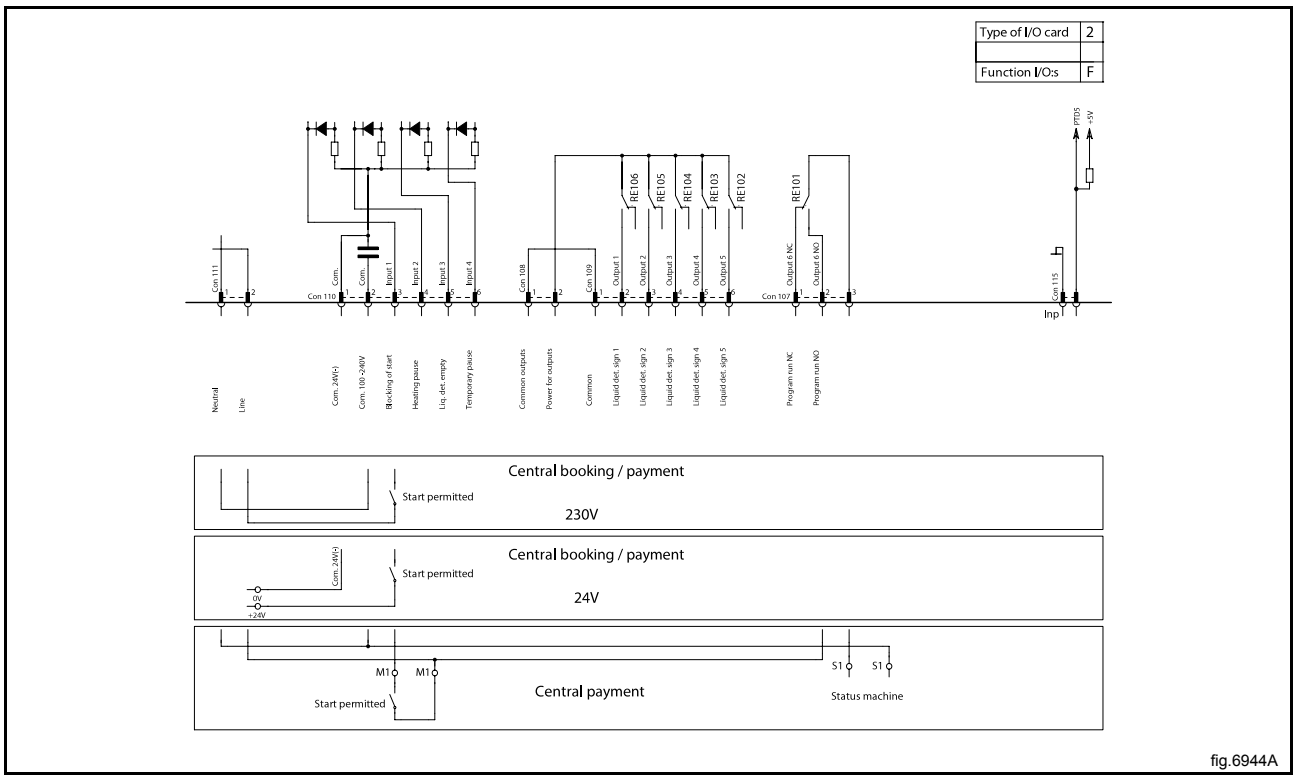
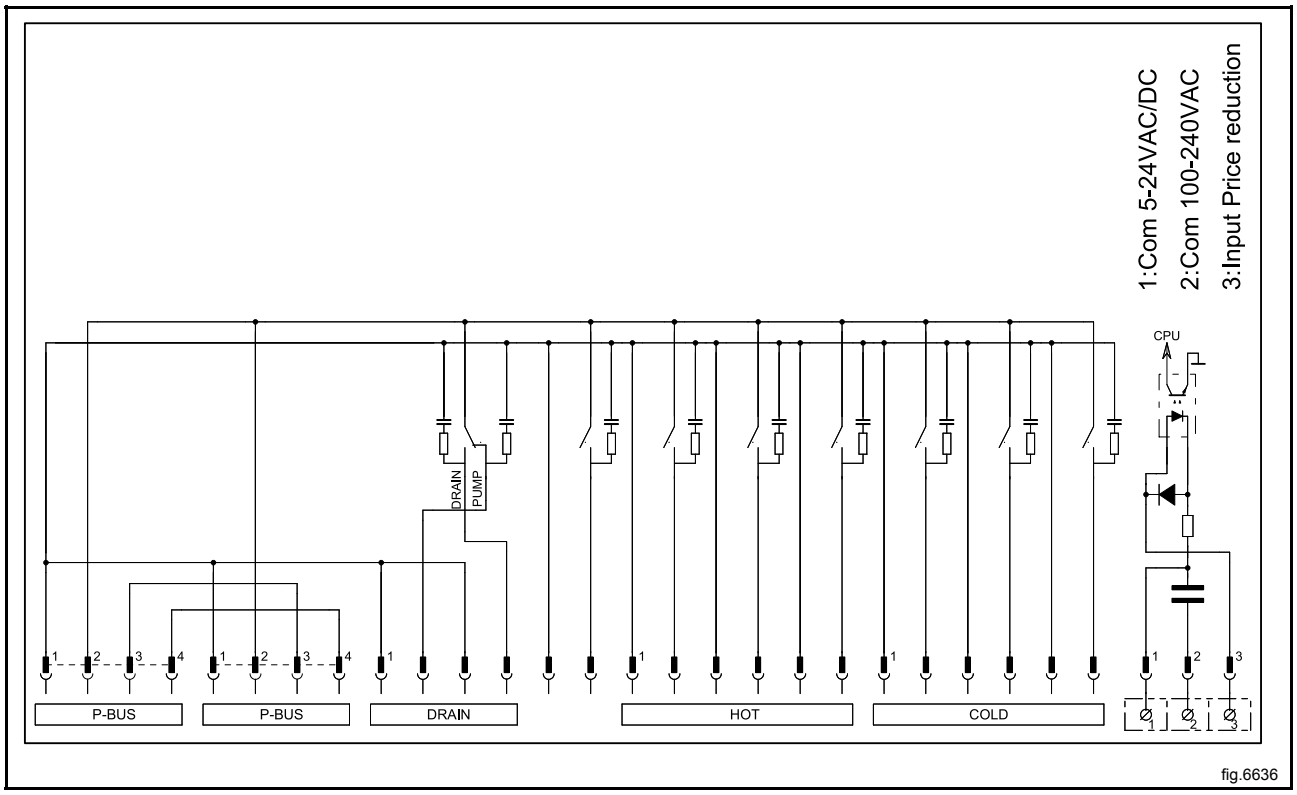



fig.6944A

### 8.4.6 Machines with I/O module type 3

By maintaining an active (high) signal on connection 3 "Price reduction”, the price of the program can be reduced. This function has a number of uses, including providing reductions during a specific period of the day. Whilst the signal remains active (high), the price of the program is reduced by the percentage entered in the price programming menu.



# 9 Steam connection

Inlet pipes connected to the machine must be equipped with a manual shut-off valve to facilitate installation and servicing.

The connection hose must be of type ISO/1307- 1983 or equivalent.

Connection size at filter:DN 15 (BSP 1/2").

Demount the top panel (A).

Demount the casing (B.

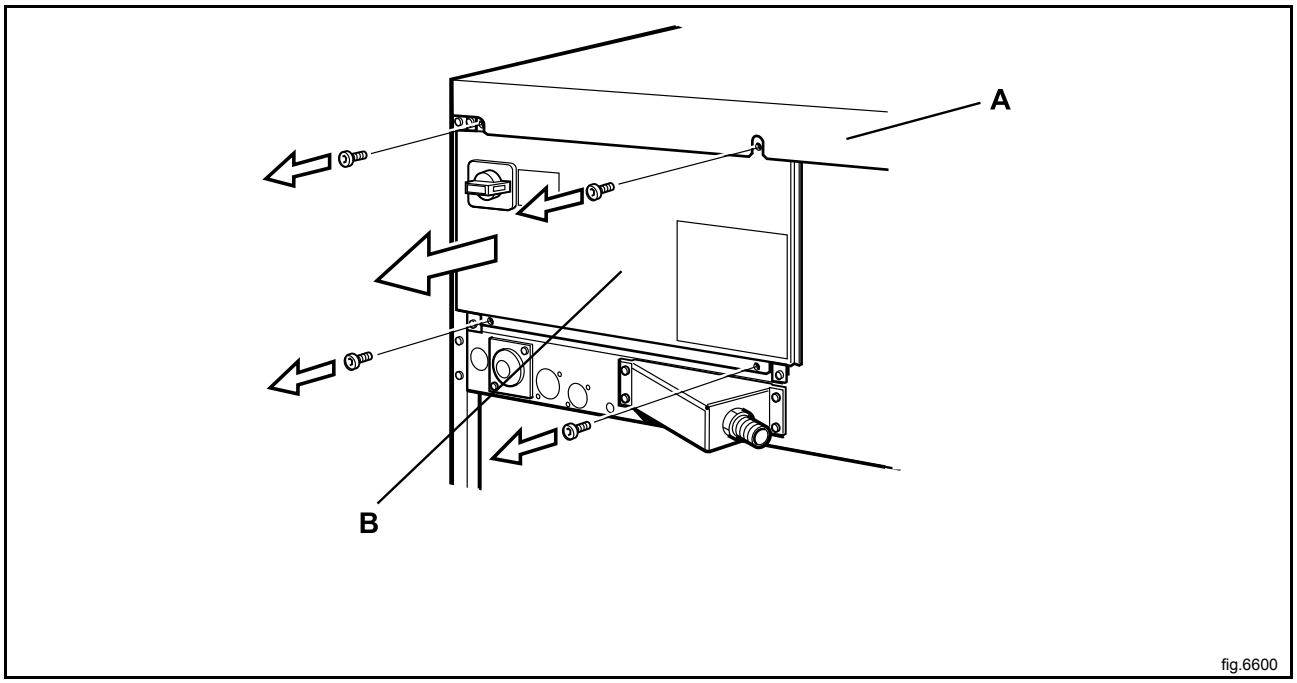


fig.6600

Mount the nipple to the steam valve.

Mount the steam valve on the machine.

Mount nipple, strainer and elbow. Note the direction of the strainer.

Mount steam hose to the elbow.

Check that there are no sharp angles or bends on the connected steam hose.

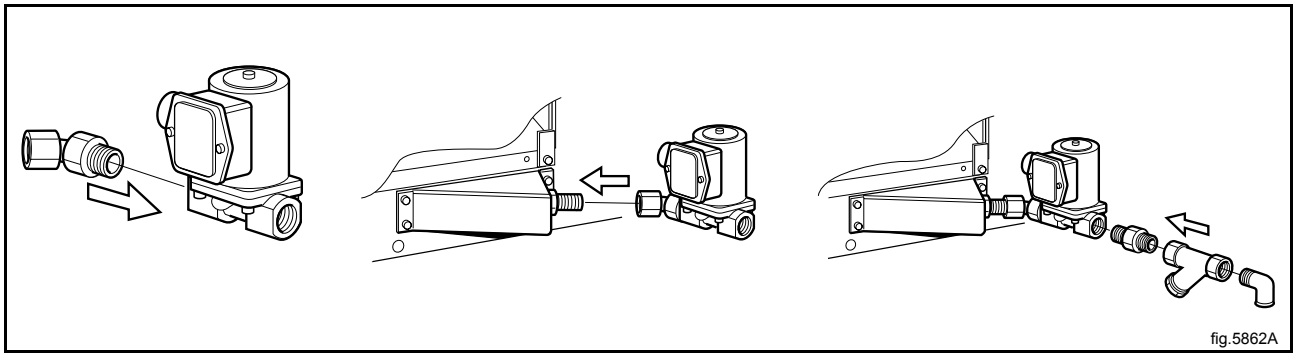


fig.5862A

Mount the hose with wires between steam valve and machine.

Connect wires in the steam valve.

Connect ground cable to the terminal ground connection.

Connect the ”HEAT” cable connector to the ”HEAT” terminal on the I/O board.

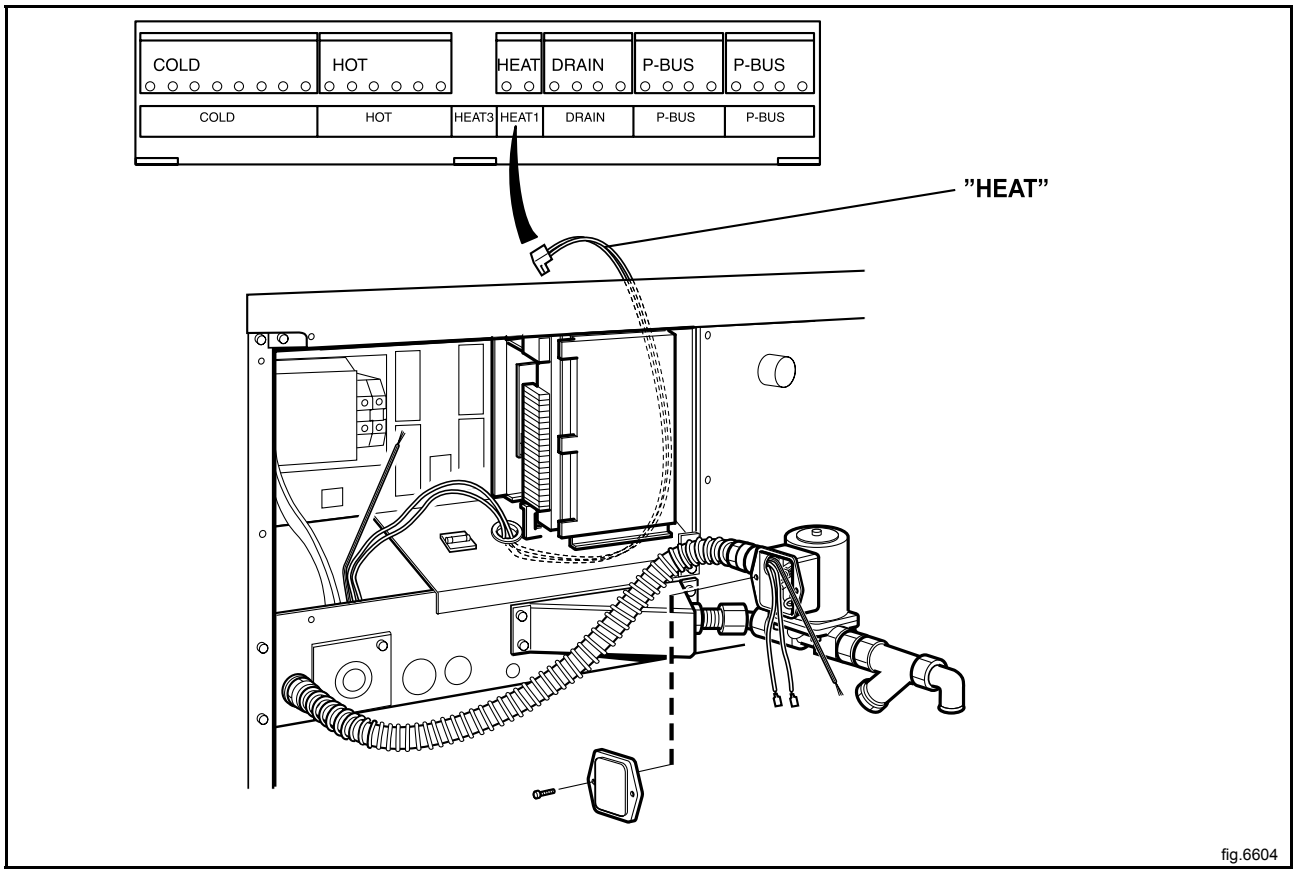


fig.6604

Steam pressure required:

- minimum: 50 kPa (0.5 kp/cm$^2$)
- maximum: 800 kPa (8 kp/cm$^2$)
- recommended: 600 kPa (6 kp/cm$^2$)

**Note!**

**A steam heated machine is only intended to use clean steam.**

# 10 Selection of language

When the installation is complete and the power is connected for the first time you will be forced to select language for the machine. Select language from the list on the display.

This will be the language that all display messages, program names etc will be presented in.

For more information about changing language and other functions please refer to the programming and configuration manual.

# 11 Function check

**May only be carried out by qualified personnel.**

A function check must be made when the installation is finished and before the machine can be ready to be used.

Open the manual water valves.

Add detergent in the compartment for main wash and start a program.

- Check that the drum rotates normally and that there are no unusual noises.
- Check that there are no leaks in water supply/drain connections.
- Check that water passes through the detergent container.
- Check that the door cannot be opened during a program.

**Ready to use**

If all tests are OK the machine is now ready to be used.

If some of the tests failed, or deficiencies or errors are detected, please contact your local service organisation or dealer.

Thinking of you
Electrolux

Electrolux Laundry Systems Sweden AB
341 80 Ljungby, Sweden
www.electrolux.com/laundrysystems

**Share more of our thinking at www.electrolux.com**